DoD 5000.4-M-1

Contractor Cost Data Reporting (CCDR) Manual

APRIL 16, 1999

Office of the Assistant Secretary of Defense (Program Analysis and Evaluation)
Contractor Cost Data Reporting Program Office

Contractor Cost Data Reporting (CCDR) Manual

PROGRAM ANALYSIS
AND EVALUATION

OFFICE OF THE SECRETARY OF DEFENSE
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WASHINGTON, D.C. 20301-1800

April 16, 1999

FOREWORD

This Manual is issued under the authority of DoD Directive 5000.4 and serves as the primary guide for the development, implementation, and operation of the Contractor Cost Data Reporting (CCDR) System. It provides background information and detailed guidance to implement the mandatory CCDR policies established in DoD Directive 5000.1, DoD Regulation 5000.2-R, and DoD Manual 5000.4M, all of which are summarized in Chapter 2. The Manual supersedes the CCDR Pamphlet and the CCDR guidance set forth in Section 2.B of the Processing Information contained in the Defense Acquisition Deskbook (DAD).

The Manual applies to DoD organizations and defense contractors who prepare CCDR reports. While the Manual in total is not mandatory or contractually binding, the guidance it contains should be followed. However, selected portions of the Manual are contractually binding when included or referenced in the Contract Data Requirements List (CDRL) and the Data Item Descriptions (DIDs). This ensures that the necessary CCDR data are accurate, consistent, and made available to DoD cost estimators in a timely manner.

Questions, comments, or suggestions about the Manual should be referred to the CCDR Project Office (CCDR-PO) via telephone (703-602-3301), fax (703-602-8944), or the CCDR web page at http://ccdr.pae.osd.mil.

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C1. CHAPTER 1
INTRODUCTION

The Contractor Cost Data Reporting (CCDR) system, as it exists today, is the product of over 50 years of events and decisions within the defense community that have affected the quality and utility of the data it contains. This Manual, developed jointly by the Office of the Secretary of Defense (OSD) and the Services with industry participation, serves as the primary source of information about operation and use of the CCDR system. It is the result of a major re-engineering effort to update the CCDR Pamphlet, which has not been changed since it was first issued in 1973. In addition to restating the mandatory guidance found in DoD 5000.2-R, the new manual contains recommended guidelines for contractors, program offices, and other stakeholders to facilitate CCDR planning and reporting. Mandatory contractor and subcontractor guidance is based on requirements stated in their contracts and subcontracts, respectively. A primary focus of this Manual is to ensure adequate contract planning that results in the appropriate contractual language to make the intended reporting requirements contractually binding. Appendix 1 describes the circumstances that gave rise to the demand for the cost information reported in the CCDR and explains how this form of cost reporting evolved.

C1.1. WHY A CCDR SYSTEM?

A system for accumulating actual contractor costs is necessary for the DoD to analyze costs efficiently and effectively. Actual cost experiences on past and current acquisition programs form the bases of projections of the costs of future systems. There are no alternatives to this practice. When defense cost analysts are faced with projecting future costs, they will get actual costs (or "actuals") one way or another. Furthermore, the need for actuals has increased with the flow of new challenges presented to defense cost analysts, particularly during periods of acquisition reform (e.g., the David Packard period). We are now in the midst of another period of acquisition reform.

More than 40 years ago, the DoD committed to the systematic, managed collection of actual costs rather than relying on ad hoc, unmanaged, inefficient methods. Building on its predecessors, the CCDR is the current DoD collection system for actual costs. This collection system is intended to feed DoD's cost analysis database that is expected to service all DoD cost analysis and program management offices.

If DoD were to revert to ad hoc, unmanaged collection of actuals, the overall costs of performing cost analysis within the DoD could be expected to rise substantially. The undesirable effects would include the following:

- limited application with non-standard data focus,
- uncoordinated, inefficient, and duplicative collection activities,

- lower productivity in cost analysis offices,
- more disruption of contractor activities,
- increased cost to obtain actuals,
- fragmented data in non-standard form,
- inability to identify previously collected data, and
- inability to easily gain access to data.

The main purpose of the CCDR system is to serve as the primary contract cost database for most DoD cost-estimating efforts. The CCDR system should be used by all DoD Components to do the following:

- *Prepare program cost estimates for major system acquisitions reviewed by the Defense Acquisition Board (DAB).* The database can also be used to support the cost-estimating requirements for programs where review responsibility resides within the Components. The database is intended primarily to support development of parametric estimating models for use in deriving independent cost estimates.
- *Develop independent government contract cost estimates in support of cost and price analyses.* The CCDR database is a useful source of contract cost data to estimate future contract costs.
- *Develop estimates to support Analysis of Alternatives (AoAs), Cost as an Independent Variable (CAIV) and long range planning efforts.*

The first purpose listed refers mainly to the activities of cost analysis organizations that prepare cost estimates for major weapon systems that ultimately are presented to the DAB at system milestone reviews. These estimates include Program Office Estimates (POEs) prepared by or for system program managers in the Military Departments, Component Cost Analyses (CCAs) prepared by Service organizations other than the program offices (usually Service cost centers or agencies), and independent cost estimates (ICEs) prepared mainly by the Office of the Secretary of Defense (OSD) Cost Analysis Improvement Group (CAIG) and Service Cost Centers.

The nature of these estimates differ substantially depending on the point in time the estimate is made, where time is measured in terms of the life of the acquisition program. Early in a program's life (Milestone 0, Concept Exploration and Definition, and perhaps Milestone I, Program Definition and Risk Reduction), a weapon system is usually described broadly in terms of its performance characteristics (e.g., range, speed, payload, etc.). At such times, few technical details are firmly established. At this point, cost estimates are usually derived at the weapon system flyaway/rollaway level[1] using

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[1] Flyaway/rollaway includes three of the level 2 WBS elements in Military Handbook 881 (prime mission equipment, system engineering/program management, and system test and evaluation). The remaining level 2 elements (training, common support equipment, peculiar support equipment, data, operational site activation, initial spares, and facilities) are excluded.

methods that use performance characteristics as independent variables. These methods are usually referred to as parametric estimating.

The second purpose of the CCDR system addresses the need for cost estimates during contracting, particularly for the engineering and manufacturing development (EMD) and production phases of an acquisition. During contracting, more is known about the physical and technical characteristics of the system. Armed with more detailed descriptions of the system and its component parts, cost analysts rely on cost-estimating relationships (CERs), methods that relate physical and technical characteristics to cost as well as engineering build-up methods. In developing such estimates, weapon systems are described in terms of Program and contract work breakdown structures (WBSs). Separate estimates are usually prepared for individual WBS elements, some of which correspond to separate contracts and others to line items in contracts. Estimates of the costs of these elements are intended to aid in contract negotiations. These component estimates are then combined with other data to arrive at a system-level estimate.

C1.2. CCDR COMPONENTS

The main components of the CCDR system are the CCDR Plan and four reports. Each component is described below.

- The *CCDR Plan* specifies the type and level of reporting by WBS element, identifies the specific report to be used, and shows reporting frequency.
- The *Cost Summary Report (DD Form 1921)* is designed to capture all contract WBS elements at the level specified in the CCDR Plan, to include both a recurring and nonrecurring breakout.
- The *Functional Cost-Hour Report (DD Form 1921-1)* focuses on selected WBS elements where more detailed cost data are needed. The report contains a functional breakout (e.g., engineering manufacturing). It also contains a cost element breakout (e.g., direct labor and material) within the functional categories.
- The *Progress Curve Report (DD Form 1921-2)* focuses on the lot or unit data for selected WBS elements. The report captures only recurring costs related to the unit.
- The *Plant-Wide Data Report (DD Form 1921-3)* provides a summary of the plant business base. It includes direct costs by program and function, indirect costs by major (standard) cost categories and functions for the purpose of understanding overhead rates. The 1921, 1921-1, and 1921-2 reports are contract-based, while the 1921-3 is plant-based.

C2. CHAPTER 2
CCDR GUIDANCE

This chapter describes the mandatory CCDR guidance in Section C2.1, the processing guidance in Section C2.2, and other guidance related to implementation of the CCDR system in Section C2.3.

C2.1. MANDATORY POLICY GUIDANCE

DoD Directive 5000.1, "Defense Acquisition" [1], establishes policies and principles for all DoD acquisition programs and identifies the Department's key acquisition officials and forums. DoDD 5000.1 identifies the Cost Analysis Improvement Group (CAIG), chaired by the Deputy Director, Resource Analysis, Program Analysis and Evaluation (PA&E), as a key forum. DoDD 5000.1 also specifies that the CAIG is responsible for reviewing DoD Component cost estimates and preparing independent cost estimates.

DoD Directive 5000.4, "OSD Cost Analysis Improvement Group (CAIG)" [2] requires the CAIG "to establish policy guidance on the CCDR system and to monitor its implementation to ensure consistent and appropriate application throughout DoD."

DoD Regulation 5000.2-R, "Mandatory Procedures for Major Defense Acquisition Programs (MDAPs) and Major Automated Information Systems (MAIS)" [3] provides mandatory acquisition procedures for MDAP and MAIS programs for translating mission needs into stable, affordable, and well-managed programs. Section 6.4.1 of DoD 5000.2-R provides specific CCDR policies as follows:

- Contractor Cost Data Reports (CCDRs) are DoD's primary means of collecting data on the costs that DoD contractors incur while working on DoD programs. Collection of these data is critical for establishing reasonable estimates of the costs of ACAT I programs. The data are also useful for other analytical purposes.
- CCDR coverage shall be from the point of commitment to engineering and manufacturing development through the completion of production in accordance with procedures described in this section. CCDR is also required on advanced development prototype programs.
- Unless waived by the Chair, CAIG, CCDR reporting is required on all major contracts and subcontracts for ACAT I programs that are valued at more than $40 million (FY 96 constant dollars). CCDR reporting may also be required on high-risk or -interest contracts priced between $6 million (FY 1996 constant dollars) and $40 million. CCDR reporting will not be required on contracts priced below $6 million.

- Reporting shall be required on firm fixed price (FFP) contracts or subcontracts except for procurement of commercial systems or for non-commercial systems when either is bought under FFP contracts that were competitively awarded (as long as competitive conditions continue to exist).
- For ACAT I programs, the CCDR plan shall be provided as part of the IPT process to the Chair, CAIG, for approval. CCDR approval should be accomplished early, preferably before a solicitation is issued to industry for advanced development prototype or engineering development contracts. The Contractor Cost Data plan reflects the proposed collection of cost data for a program. The plan shall provide this information by WBS and shall describe the report forms to be used and the reporting frequency.
- Each DoD component shall designate, by title, an official who shall:
  - ensure that policies and procedures are established for implementation of CCDR in accordance with this section, including storage of CCDR data and their distribution to appropriate DoD officials;
  - ensure that all CCDR plans for ACAT I programs, including any changes, are reviewed and concurred with (in compliance with CCDR plans and the program WBS) and forwarded to the CAIG; and
  - advise the Chair, CAIG, annually of the status of all acquisition programs for which CCDR plans are approved for implementation and of any delinquencies or deficiencies in CCDR and actions being taken to remedy them.
- The need for field reviews of contractor implementation of CCDR reporting shall be assessed annually. The Chair, CAIG, is responsible for prescribing a format for submission of CCDRs, implementing policies pertaining to the CCDR system, and monitoring its implementation to ensure consistent and appropriate application throughout the DoD.
- The following general policies guide the preparation and submission of CCDR data:
  - *Level of Cost Reporting.* Routine reporting will be at contract WBS level 3 for prime contractors and key subcontractors. In addition, detailed (i.e., sub-level 3) reporting will be required only for those lower elements that address high-risk, high-value, or high-technological interest areas of a program. Identifying these additional elements is a critical early assignment for program Cost Program-level IPT (which may include contractor membership if appropriate and in accordance with applicable statutes). Each element must be justified in terms of its contribution to efficient decision making.
  - *Frequency.* The CCDR system is fundamentally a “returned” (or actual) cost reporting system and, as such, CCDRs do not generally need to be filed while work is still pending. Thus, for production, CCDRs shall be submitted upon the delivery of each annual lot. Developmental contracts

are an exception. While the frequency of reports on these contracts will be defined by the needs of the program for cost data, at a minimum, CCDRs will be filed after major events (e.g., first flight or completion of prototype lot fabrication) or before major milestone reviews. In general, quarterly and annual reporting requirements do not meet the above requirements. However, there are points during a contract's life cycle (both production and development) when cost data may be needed for other valid cost-estimating purposes. These additional requirements are left to the IPT process to propose and for the Chair, CAIG, to approve or disapprove.

- Tailoring the CCDR plan and appropriately defining the program WBS are key to achieving a cost-effective reporting system. Hardware system contractors shall participate early in the Cost Program-level IPT. The contractors often will have suggestions that reduce reporting costs while preserving the utility of the data for the government.

DoD Manual 5000.4, "Cost Analysis Guidance and Procedures" [4] provides for the following:

- A copy of the CCDR Plan approved for the program should be included in the Cost Analysis Requirements Description (CARD). If the Plan has not yet been approved, or is waiting approval, include a copy of the proposed CCDR Plan as submitted to the OSD CAIG (or the designated Service CCDR focal point if the program is an Acquisition Category (ACAT) II or III, program—see Table 1 for ACAT program criteria).
- Actual cost experience on prototype units, early engineering development hardware, and early production hardware for the program under consideration should be used to the maximum extent possible from the CCDR system.
- The status of the CCDR Data Plan, or, if implemented, of CCDR reporting on the defense program being reviewed, should be presented to the CAIG during the milestone review process.

C2.2. RECOMMENDED CCDR PROCESSING GUIDANCE

The following recommended guidelines are designed to facilitate communication and to provide common expectations about the CCDR system to CCDR stakeholders. These guidelines establish an operational framework that, when followed, will quickly produce the required cost and business data needed for cost-estimating purposes. The CCDR Project Office developed the guidelines in coordination with the CCDR Focus Group. We recommend these guidelines be followed as closely as possible to preserve the accuracy, reliability, and timeliness of the standard CCDR system. However, the PM, with CIPT advice, may justify alternative business approaches to the CAIG if unique program requirements warrant.

C2.2.1. Objective

The primary purpose of this subsection is to specify CCDR processing guidance for ACAT IC and ID programs (see Table 1 for ACAT program criteria). This involves

determining not only the relevant processes and activities but also when they should be accomplished and who should accomplish them. The guidance covers the entire cradle-to-grave cycle of the CCDR system and applies to normal CCDR requirements. The processing guidance for ACAT II and III programs should be identical to those provided for ACAT I programs. However, the individual Services have the discretion to deviate from this guidance for ACAT II and III programs. As noted in DoD 5000.2-R, no DoD Component shall add mandatory requirements to those specified in DoD 5000.2-R for ACAT II and III programs.

C2.2.2. Major CCDR System Activities

The following major processing activities support the planning and implementation of the CCDR system. The CCDR program planning process typically begins in Phase O (Concept Exploration) in preparation for Milestone I (Approval to Begin a New Acquisition Program). The process is repeated during Phases I (Program Definition and Risk Reduction) and II (Engineering and Manufacturing Development) in preparation for Milestones II (Approval to Enter Engineering and Manufacturing Development) and III (Production or Fielding/ Deployment Approval), respectively.

The activities are designed to begin reporting estimated costs in response to the solicitation to industry for Phase I contract awards that include advanced prototype development. Phase I contracts without prototype requirements may also have CCDR reporting if proposed and justified in the CCDR Plan approval process. Reporting of actual costs begins after award of the Phase I contract. The activities are guided by the detailed processing information shown in Subsection C2.2.3. These categories are used to determine responsibility for administering the CCDR system (i.e., the CAIG is responsible for ACAT ID and the Components are responsible for ACAT IC, ACAT II and III programs).

Table 1 summarizes how programs are classified according to estimated dollar value for research, development, test and evaluation (RDT&E), production, annual, acquisition, and life-cycle costs. CCDR reporting and processing requirements are determined by ACAT program category and the value of individual contracts and subcontracts within the program. The rules governing contract value (see Paragraph C2.2.3.10) are the same for all contracts and subcontracts within all categories *except ACAT 1A programs, which are currently exempt from CCDR reporting.*

Table 1. Acquisition Program Categories

Program Category	RDT&E	Production	Annual	Acquisition	Life Cycle
ACAT I (D & C)[a]	>$355M	>$2.135B			
ACAT 1A[b]			>$30M	>$120M	>$360M
ACAT II[c]	>$140 to ≤$355M	$>645M to ≤$2.135B			
ACAT III	≤$140M	≤$645M	≤$30M	≤$120M	≤$360M

Note: All costs are shown in FY 1996 constant dollars.
[a] Major Defense Acquisition Program (MDAP).
[b] Major Automated Information System (MAIS).
[c] Major System.

The detailed process typically occurs as follows:

- The CCDR Project Office (CCDR-PO) begins planning for CCDR reporting by reviewing the available acquisition documentation, including the Major Defense Acquisition Program (MDAP) list, and notifying the appropriate Cost Integrated Product Team (CIPT)[2] members. The CCDR-PO ensures that all appropriate CCDR stakeholders are included in the CIPT process. The assigned OSD analyst ensures the CCDR planning process for ACAT ID programs begins in a timely manner. The assigned Service cost center/agency analyst ensures the CCDR planning process for ACAT IC programs begins in a timely manner. (See Paragraph C2.2.3.1 for team composition.) This planning generally occurs between 8 and 12 months before the Overarching Integrated Product Team (OIPT) Milestone I review. (See Part 5.4 of DoD 5000.2-R [3] for a description of the OIPT.)
- The CIPT should determine CCDR Plan requirements. The draft Plan should be completed in time to be included in the draft CARD, which is due approximately 180 days before the OIPT. Simultaneously, the CIPT submits a copy of the Plan to the CCDR-PO. To minimize problems, the Plan should be completed no later than 60 days before the solicitation to industry. The Plan should conform to the reporting requirements shown in Subsection C2.2.3, CCDR Processing Guidance. Additional guidance for preparing the CCDR Plan is contained in Chapter 3.
- The program manager (PM)[3] submits the CCDR Plan and WBS Dictionary with CIPT concurrence as part of the CARD. The CIPT is responsible for obtaining coordination within the Component in accordance with established policies. The PM prepares the CCDR Plan in electronic format for all new CCDR Plans.
- OSD CAIG adjudicates the draft Plan within 14 days after receipt.
- The PM ensures the results of the approved program CCDR Plan are contained in the Contract CCDR Plan used in the solicitation to industry. The PM is responsible for keeping the CIPT and the CCDR-PO informed about the status of the CCDR Plan in the solicitation. The PM forwards an extract of that RFP that contains the CCDR requirements to the CCDR-PO before issuing the RFP. The CCDR-PO follows-up with the PM and the CIPT if the solicitation deviates from the approved CCDR Plan.
- Contractors provide estimates in DD Forms 1921 and 1921-1 formats in accordance with the Contract CCDR Plan as part of the response to the solicitation.

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2 For purposes of this document, the CIPT represents the working-level IPT (WIPT) (according to part 5.4 of DoD 5000.2-R) that has been assigned responsibility for acquisition cost estimating.

3 The term *program manager* as used in this document refers to the appropriate DoD PM.

- The PM submits the final Program CCDR Plan and WBS dictionary to the CCDR-PO 45 days before the OIPT review. The CCDR-PO coordinates the final Plan with the CIPT members.
- The Component provides the status of the CCDR system, including the Plan, and if implemented, the CCDR reports, at the CAIG review that occurs 21 days before the OIPT review. The director of the CCDR-PO will also provide a status of the CCDR system to the CAIG chair with recommended action items, if appropriate, no later than 5 days before the CAIG review. Any Plan or reporting problems should be resolved within 10 days after the CAIG meeting. Unresolved issues will be documented as action items for presentation to the OIPT.
- The OIPT reviews the program prior to the DAB.
- Through the Contracting Officer, the PM awards the contract after DAB milestone approval.
- The PM forwards a copy of the CDRLs that establish the WBS, WBS Dictionary, and CCDR reporting requirements to the CCDR-PO within 30 days after the contract containing such requirements is awarded. The PM forwards a copy of each DD 1921, DD 1921-1, and DD 1921-2 report that is contractually required within 180 days of contract award for development contracts and for first full-rate production contracts to the CDDR-PO.
- Any proposed revisions to the approved plan should be coordinated with the CIPT for CAIG review and approval before contract award. The PM includes the approved CCDR Plan requirements in the contract award.
- Contractors begin development and production reporting as specified in the contract and Subsection C2.2.3, CCDR Processing Guidance. (See Paragraph C2.2.3.11, Reporting Frequency and Due Dates, for specific guidance.)
- Contractors begin mandatory electronic data interchange (EDI) reporting for ACAT 1D and 1C programs (if not already in place) effective 1 June 1998 for all new contracts. For all other existing contracts, contractors begin EDI reporting on 1 October 1999. (See Paragraph C2.2.3.12, CCDR Report Media, for additional details).
- Contractors end CCDR reporting for development and production contracts 180 days after the end of the month in which the final major end item was delivered and accepted. The 180 days consists of the “as of” date that is 120 days after the month of final delivery and an additional 60 days for submission time. (See Paragraph C2.2.3.11, Report Frequency and Due Dates for additional details.)

C2.2.3. CCDR Processing Guidance

The following major components are described in the paragraphs that follow.

C2.2.3.1. CIPT

C2.2.3.2. CCDR Plan

C2.2.3.3. WBS

C2.2.3.4. WBS Dictionary

C2.2.3.5. Solicitations

C2.2.3.6. CDRL

C2.2.3.7. CCDR Status Reporting

C2.2.3.8. CCDR Plan Media

C2.2.3.9. Contract Types

C2.2.3.10. Contract Value

C2.2.3.11. Reporting Frequency and Due Dates

C2.2.3.12. CCDR Report Media

C2.2.3.13. Report Preparation

C2.2.3.14. Report Acceptance and Distribution

Each begins with a description of the specified CCDR component. The guidance associated with each component immediately follows the description. This guidance applies to all contracts and subcontracts within a program. Detailed contractor and subcontractor reporting rules are shown in Chapter 4. The CCDR-PO encourages subcontractor reporting through the prime contractor to facilitate processing. However, the ultimate decision for determining such submission is left to the prime and subcontractor.

C2.2.3.1. Cost Integrated Product Team (CIPT)

The CIPT is the CCDR customer who advises the program manager (PM) on cost analysis requirements for programs and contracts to facilitate the preparation of timely, high-quality cost estimates. The CIPT typically should include but not be limited to designated cost analysts from the CAIG, the Component cost center/agency, the Component commodity command/center, the program office, and the representative contractors, as appropriate. The CIPT generally includes participation by the PM's earned value management system (EVMS) and systems engineering (SE) representatives to assist in building the WBS. The need for additional EVMS and SE participation at other DoD levels is left to the discretion of the PM and the CIPT. Other parties having an interest in CCDR system implementation are encouraged to participate in the CIPT deliberations regarding CCDR requirements. The Component is responsible for identifying the Component analyst to participate in the CIPT effort.

C2.2.3.2. CCDR Plan

The CCDR Plan is the document for communicating contractor cost data requirements to contractors on programs and contracts. Requirements include report type, level of WBS reporting, and frequency. The CCDR Plan only establishes requirements for the four CCDR reports. It no longer serves as the reference document for the earned value management system (EVMS). This was done to provide more flexibility to the PM in tailoring an EVMS reporting structure that reflects how the contractor manages. The

selected EVMS structure, if different than the WBS, does not obviate the need for a WBS structure for CCDR reporting. The PM is usually responsible for preparing CCDR Plans and coordinating them with the CIPT. See Chapter 3 for detailed procedures for preparing the CCDR Plan.

The CAIG reviews and approves all ACAT 1C and 1D program CCDR Plans and any subsequent changes, including all block changes, before contract award or modification. This procedure also applies to contracts that contain options, for example, if CCDR requirements are expected to change when a contract option is exercised, a revised CCDR Plan is submitted for CAIG approval prior to award. CCDR plans should also be updated to reflect current policy regarding CCDR requirements before any new contract or major modification is made. Changes should first be presented to the CIPT (or designated analyst if CIPT no longer exists), who, in turn, should submit any change request (any change involving the WBS, CCDR report type, and report frequency) to the CAIG. The CAIG adjudicates the Plan within 14 days of CIPT action.

Service Acquisition Executives should delegate responsibility for administration of the CCDR system for ACAT II and III programs to their respective cost centers/agencies. The CAIG approves ACAT 1D and 1C CCDR Plans.

C2.2.3.3. WBS

The WBS is a product-oriented family tree composed of hardware, software, services, data, and facilities. This family tree is closely developed with systems engineering efforts and other area experts, as appropriate, during the acquisition of a defense materiel item. The WBS is an integral part of the CCDR Plan and subsequent reporting.

Military Handbook (MIL-HDBK) 881, “Work Breakdown Structures for Defense Materiel Items” [5] serves as the basis for identifying the first three levels of the program WBS and developing the contract WBS. Extensions of the WBS can be tailored to the specific program but should be consistent with MIL-HDBK-881. Contract reporting should normally be at level 3 of the contract WBS and be consistent with MIL-HDBK-881. See Paragraph C2.2.3.1 for a more detailed discussion of program and contract WBS development. The PM, in coordination with the CIPT, identifies any needed reporting below this level in the draft CCDR Plan to selectively address high-risk, high-value, or high-technical-interest elements. Each element should be justified in terms of its contribution to cost-estimating needs. See Appendix 3 for a description of each of the three exception criteria. Another important consideration in the CAIG review process of proposed lower level reporting is whether the requested data are already available or will be available in the contractor’s information system to satisfy other (non-CCDR) requirements.

There is a single contract WBS. The CCDR system *always* uses the contract WBS for reporting purposes while EVMS *may* use the contract WBS for reporting. The focus of EVMS is on program management, which may generate a need for alternative reporting elements apart from the contract WBS to reflect how the program and contract are being managed. The contractor has the option of using either the contract WBS or the EVMS reporting elements, if different, to collect the data. In either case, the contractor

must develop and implement a cost-allocation scheme to reasonably assign costs to the other reporting element requirements. Finally, there is no requirement to use budgeted cost of work performed (BCWP) and budgeted cost of work scheduled (BCWS) in developing estimates at completion (EACs) for CCDRs. However, when EVMS reports are prepared, the EACs should agree with those prepared for CCDRs.

C2.2.3.4. WBS Dictionary

The WBS Dictionary describes each program/contract WBS element throughout the life of the contract. The Dictionary should be submitted to the CCDR-PO with the CCDR Plan. Updates to the program/contract Dictionary should be provided to the CIPT and the CCDR-PO as they occur. The PM, in coordination with the CIPT and appropriate contractor, is responsible for preparing the program/contact WBS Dictionary.

C2.2.3.5. Solicitations

Solicitations provide contractors with the information they will need to properly respond to the government's requirements by submission of a proposal or a bid. The PM should require contractors to submit the 1921 or 1921-1 reports in response to the solicitation when CCDR requirements will be placed on contract. The PM should make every effort to keep the reports to a minimum, particularly the 1921-1 report, to help streamline solicitation responses.

The PM should incorporate the content of the approved CCDR Plan and Dictionary into the solicitation. Generally, the program office keeps the CIPT and the CCDR-PO informed about the status of the CCDR Plan in the solicitation. The CIPT may request 1921 and 1921-1 report formats to support development of program estimates and annual cost estimates. The CCDR-PO follows-up with the CIPT to ensure that the issued solicitation is consistent with the CCDR Plan and Dictionary.

C2.2.3.6. Contract Data Requirements List (CDRL)

The CDRL, DD Form 1423, is a contractual exhibit referred to in the contract that identifies the specific data deliverables.

The program office forwards one copy of the CDRL items that establish the WBS, WBS Dictionary, and the CCDR reporting requirements to the CCDR-PO within 30 days after the contract containing such requirements is awarded. This is done to ensure consistency with the approved CCDR Plan. CDRL items may be submitted in electronic or hard-copy form.

C2.2.3.7. CCDR Status Reporting

Status refers to the current condition of the CCDR Plan and its required reporting in terms of receipt, approval, content, frequency, accuracy, and contractual coverage. The Component provides the status of CCDR processing, including the CCDR Plan and any applicable previous CDDR reports, at the CAIG review 21 days before the OIPT review. The Director of the CCDR-PO also provides the status of the CCDR processing with

recommended action items, if appropriate, to the CAIG Chair no later than 5 days before the CAIG review.

C2.2.3.8. CCDR Plan Media

Media refers to the instruments used to transmit CCDR plans and reports via hard copy, electronic disk, and electronic data interchange (EDI). All new CCDR Plans should be submitted electronically using the approved CCDR planning tool (see Chapter 3).

C2.2.3.9. Contract Types

Contract type refers to the specific pricing arrangements employed for the work under contract. The two basic contract types are cost reimbursement and fixed price contracts. There are many variations (e.g., incentive arrangements) within the basic categories to accommodate cost risk and special situations.

All contract types are eligible for CCDR reporting except for selected FFP contracts. Specifically, reporting shall be required on FFP contracts or subcontracts except for procurement of commercial systems or for non-commercial systems when either is bought under FFP contracts that were competitively awarded. This exception applies for as long as competitive conditions continue to exist. This provision applies to all ACAT I, II, and III programs with CCDR requirements.

C2.2.3.10. Contract Value

Contract value is the total price of the contract that includes costs and profit or fees.

All major contracts and subcontracts valued over $40 million (in FY 1996 dollars) are subject to CCDR reporting requirements. Contracts priced between $6 million and $40 million (in FY 1996 dollars) are subject to CCDR reporting requirements when the CIPT determines, and the CAIG agrees that they are high-risk or high-technical-interest items. Contracts priced below $6 million (in FY 1996 dollars) are not subject to CCDR reporting. This provision applies to all ACAT I, II, and III programs with CCDR requirements.

C2.2.3.11. Reporting Frequency and Due Dates

Frequency refers to the timing of report submissions (e.g., report at contract completion, report at lot completion, and report as required).

The initial DD 1921, 1921-1, and 1921-2 reports reflecting estimated costs will be submitted to the CCDR-PO within 180 days of contract award for development contracts and for first full-rate production contracts. Subsequent reports will be submitted as specified in the contract. The purpose of the initial submission is to ensure reporting consistency with the CDRL and CCDR Plan. For *Phase I (Program Definition and Risk Reduction)* and *Phase II (Engineering and Manufacturing Development) development contracts*, report frequency for the DD 1921, 1921-1, and 1921-2 reports (the DD 1921-3 is an annual report) should be tied to significant events rather than the passage of time. Such events include reporting after first flight test, prototype completion, and low-rate initial production (LRIP) completion or before major milestones or other significant

decision points. Specific “as of” and submission dates occurring before the event date should be established to facilitate report planning and preparation. Typically, the “as of” date would be at the end of the month in which the date that is 180 days before the event date occurs.

CCDR reporting is only mandatory on Phase I contracts that include requirements for advanced prototype development. Reporting on other Phase I contracts are left to the discretion of the CIPT to propose and for the CAIG to approve.

For *Phase III (Production) contracts*, the goal is to require only one final report (see Paragraph C2.2.3.13, Report Preparation) after delivery of each fiscal year buy (i.e., after the last unit for unit reporting or the last unit of the last lot for lot reporting). However, the CIPT may propose interim reporting with CAIG approval (to include estimates at completion) when justified to support valid cost-estimating needs related to specific program or contract events.

For *final reporting*, the “as of” date for all development and production is 120 days following the end of the month in which the last major end item was delivered and accepted. As noted below, the due date for final reporting is 60 days after the “as of” date.

Frequency requirements different than those outlined above are left to the discretion of the CIPT to propose and for the CAIG to approve.

Due dates refer to the “not later than” delivery dates of the CCDR reports to the CAIG. The contractor should submit interim reports within 45 days after the end of the reporting period as specified in the CCDR Plan. When subcontractors report to the prime contractor, an additional 15 days is allowed to consolidate the appropriate reports. All interim reports as specified in the CCDR Plan should include estimates at completion (EACs). Final reports should be prepared, marked final, and submitted 180 days after the end of the month that the final major end item was delivered and accepted (or 60 days after the “as of” date). All final reports should include EACs for any reported element where actual costs incurred are less than 100 percent of their respective EACs.

C2.2.3.12. CCDR Report Media

Media refers to the instruments used to display CCDR Plans and reports such as hard copy, electronic disk, and electronic data interchange (EDI). *Beginning 1 June 1998*, contractors should submit all new CCDR ACAT 1C and 1D reports in EDI format (Transaction Set 196) according to their approved CCDR Plans. Contractors should also provide a hard copy of the initial submission for each of the four report formats to allow for validation of the electronic version. For all other existing contracts, EDI reporting begins on *1 October 1999*.

C2.2.3.13. Report Preparation

Contractors prepare CCDR reports in accordance with contractual requirements, which should reference and comply with the guidance contained in this Manual. To ensure consistency, contractors should report accounting changes and their resulting effects on CCDR reporting in the “Remarks” section of each report.

Contractors should also report any significant configuration changes resulting from block changes within a given lot to allow for separate cost estimating. Contractors must report the total contract software costs by "incurred to" date and "at completion" in the "Remarks" section of the 1921 report. The recurring/nonrecurring split is not required. See Subsection C5.2.7 of this Manual, Software Costs, for the definition of software.

C2.2.3.14. Report Acceptance and Distribution

Acceptance is the acknowledgment of receipt of CCDR report and notification to contractors by the responsible DoD organization (e.g., CCDR-PO). Distribution means making the CCDR data available to authorized users. Acceptance and distribution occur in three stages as noted below.

First, for EDI reporting, the receiving DoD activity performs a syntax check and notifies the contractor of acceptance or rejection based on the presence of any fatal errors.

Second, the CCDR-PO makes all CCDR data received electronically available to designated recipients (e.g., DoD PM). If requested, the CCDR-PO will make alternative arrangements for providing the CCDR reports, such as mailing hard copies. CCDR data will not be made available to any other DoD users having a valid need until 30 days after receipt by the CCDR-PO. Earlier release will be authorized if data have been reviewed and accepted. The 30-day period is designed to provide the designated recipients the opportunity to review the data and notify the CCDR-PO of the results. The CCDR-PO considers the CCDR data to be acceptable to all receiving parties if a response is not received by the end of the 30-day period.

Third, the CCDR-PO validates the data and transmits either report acceptance or notice of exceptions. Contractors may need to correct and resubmit the data in accordance with contract requirements.

C2.3. OTHER GUIDANCE

C2.3.1. WBS

MIL-HDBK-881 [5] provides criteria for developing and using WBSs during the acquisition phase. The WBS subdivides, displays, and defines the products to be developed and produced. This Manual is intended for use by both DoD and contractors in developing program and contract WBSs. The structures and definitions contained in the Manual serve as the common basis for developing individual program and contract WBSs for the following seven categories of defense materiel items:

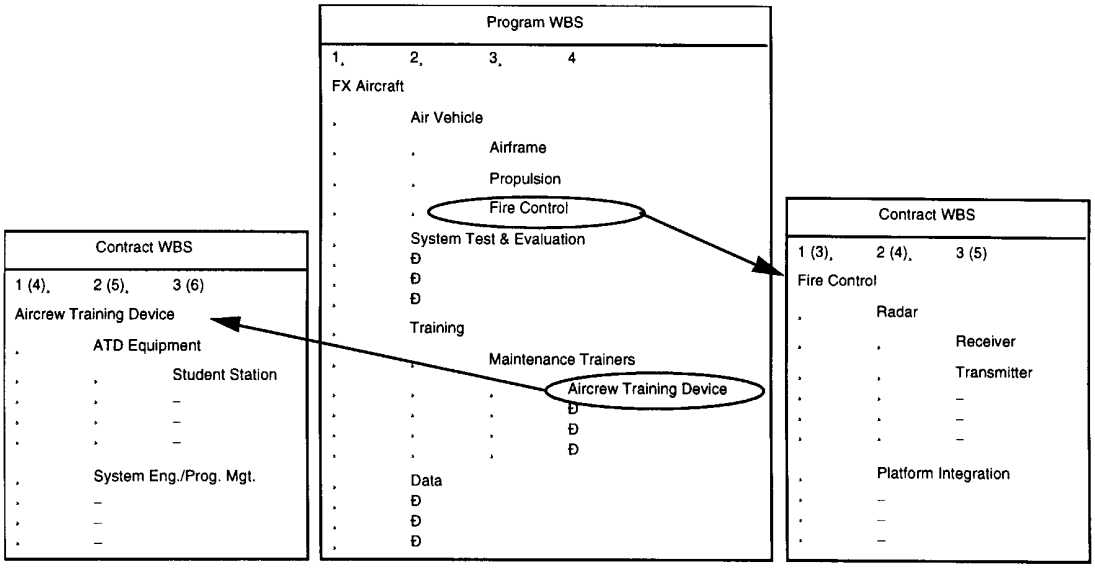
- Aircraft Systems,
- Electronic/Automated Software Systems,
- Missile Systems,
- Ordnance Systems,
- Ship Systems,

- Space Systems, and
- Surface Vehicle Systems.

In a WBS, a product is represented as a hierarchical tree composed of hardware, software, facilities, data, services, and other work tasks. This tree completely defines the product and the work to be accomplished to achieve the product. It relates the elements of work to each other and to the end product. MIL-HDBK-881 contains generic WBSs by commodity type. The Military Departments use them as a starting point for developing a specific program WBS for a new system. A program WBS covers the acquisition of a specific defense material item and is related to contractual effort. In the case of a tactical aircraft, this effort includes not only the air vehicle, but also support equipment, training, site activation, and other support functions.

A PM is given responsibility for developing, producing, and fielding a new system and decides how to acquire each element of the program. Typically, the PM will place certain applicable WBS elements on contract. For such items, a contract WBS is created to extend the program WBS, starting with the element placed on contract.

Figure 1 depicts the relationship between a program WBS and contract WBSs. For illustration (as per MIL-HDBK-881), two elements of the program WBS are extended in this way. A level 3 item in the Program WBS, "Fire Control," and a level 4 item, "Aircrew Training Device," have extended Contract WBSs. Note the difference in the level numbers of identical items in the Program WBS versus the Contract WBS (shown in parentheses in the figure). That is, a level 1 item in a contract WBS corresponds in this example to a level 4 item in a program WBS. Contractors are required, by contract, to report costs in CCDR formats using the negotiated contract WBS. It is worth noting here that cost data collected via a CCDR report represents elements typically at level 3 or below in the program WBS. For example, CAIG policy is to collect contract data at level 3 of the contract WBS. This level is often below level 3 of the program WBS.



Source: Reference [12].

Figure 1. Relationship of Program WBS and Contract WBSs

C2.3.2. Defense Contract Audit Agency (DCAA) Guidance

Section 11-306 of Defense Contract Audit Agency Manual (DCAAM) 7640.1M [6], establishes DCAA audit responsibilities involving the CCDR system. The Manual directs DCAA auditors to:

- evaluate the effectiveness of the contractor's system, policies, and procedures for accumulating data and preparing CCDRs at least once each year, and
- prepare audit reports documenting the results of their review and submit to the Administrative Contracting Officer (ACO) and provide copies to the designated Component official for CCDR reporting and the OSD CAIG.

C2.3.3. Electronic Data Interchange

Electronic Data Interchange (EDI) Convention, Accredited Standards Committee (ASC) X12 Transaction Set 196, Contractor Cost Data Reporting, establishes the EDI input formats for each of the four CCDR reports. The Logistics Management Institute (LMI) developed the transaction set for DoD. The convention provides overall guidance on the implementation of American National Standards Institute (ANSI), ASC X12 EDI standards for automated information systems (AIS). The current approved EDI Convention for Transaction Set 196 can be found as a CCDR link at the CCDR web page (http://www.ccdr.pae.osd.mil). The Getting Started Handbook for EDI implementation (http://www.acq.osd.mil/pm/edi/gshdbk.htm) can also be found as a link at the CCDR web page. The Getting Started Handbook includes the basic structure and information that program offices can use to develop their individual plans for implementing EDI for program management reporting.

The guidance in Transaction Set 196 is intended for use by the DoD community and any non-DoD entity (e.g., defense contractors) to exchange CCDR data. The common formats allow each of the trading partners to readily understand each other's messages, which facilitates application software development, including the establishment of electronic databases.

C2.3.4. Central Repository System

Chapter 6 of this Manual provides a summary description of the planned automated central repository system for CCDR information. In addition, other documentation specifies the detailed automation requirements, establishes the systems architecture, and provides operating instructions and the source code for the entire automated system. Documents will include user manuals, program maintenance manuals, and "as built" documentation primarily intended for system users, system administrators, and system analysts who develop and maintain the software.

C3. CHAPTER 3

DOD PLANNING AND CONTRACTING

The CCDR Plan is the key document in establishing reporting requirements throughout each phase of the acquisition program. The plan is needed both for the request for proposals (RFP) and contract award processes, and its primary purposes are to serve as the:

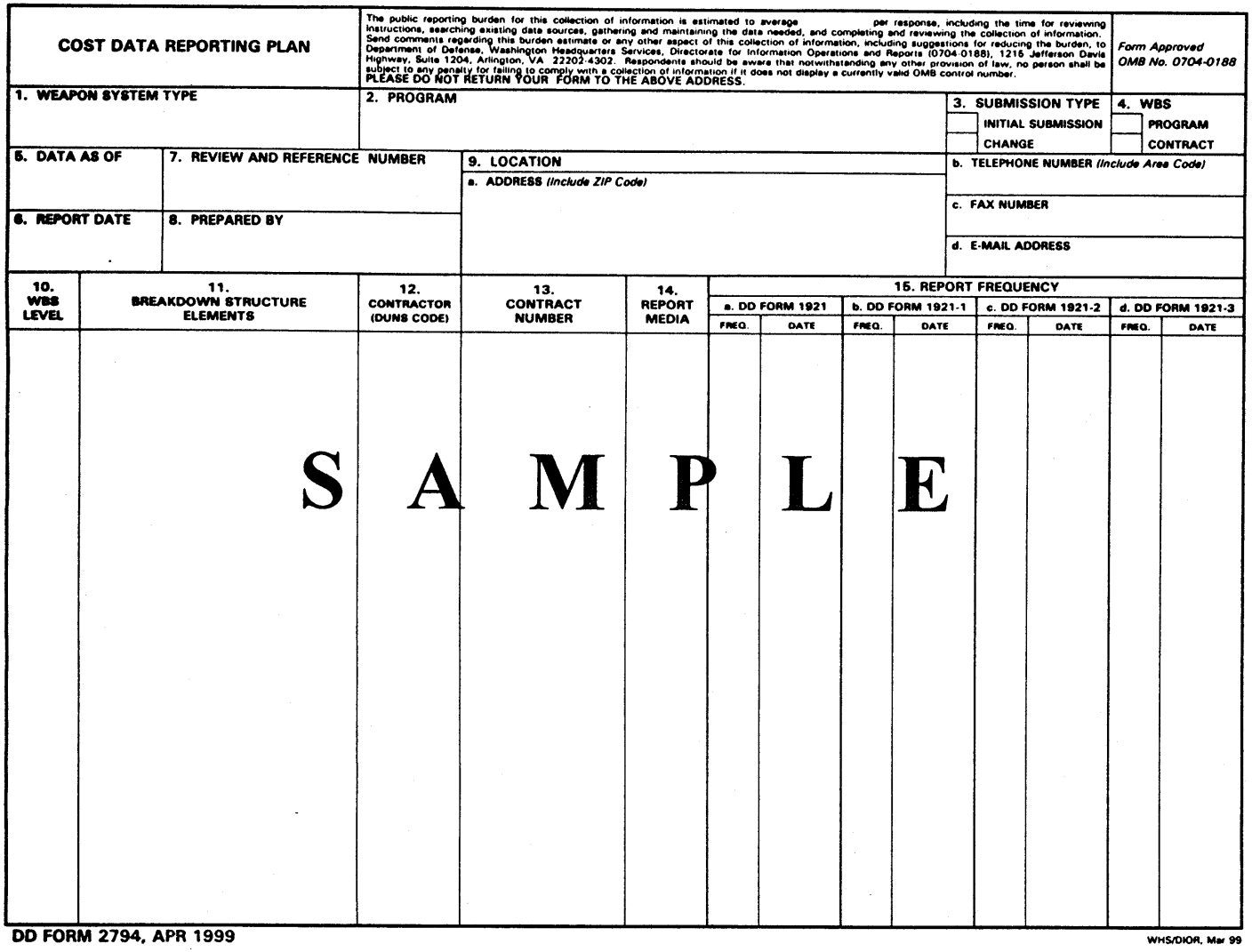
- reference document for data requirements on contract,
- source document used to compare with actual reporting data from contractors to ensure that data are reported as planned,
- source document along with data dictionary to compare data plans and definitions with different WBS levels and weapon systems.

Section C3.1 describes the general procedures to be followed in preparing the plan. Subsections C3.1.1 and C3.1.2 provide the detailed instructions for completing the CCDR Plan. Subsection C3.1.3 summarizes the software to be developed to support this effort.

C3.1. PROCEDURES

The CCDR Plan format depicted in Figure 2 reflects the proposed collection of CCDR cost data by contract, program, reporting elements, report type, and frequency of reporting. The Plan can be either for the entire program or for an individual contract within a program. The PM prepares the plan in conjunction with the CIPT, and the OSD CAIG (for ACAT I programs) or designated Component organization (for ACAT II and III programs) approves it. Participation by all appropriate CCDR stakeholders in the early development of the CCDR Plan will facilitate communication about program and contract cost estimating throughout the acquisition life cycle. ACAT I program plans should be submitted with the CARD 180 days before the appropriate milestone decision and in sufficient time to include the results of the CAIG review in the solicitation to industry.

The reporting elements consist largely of the WBS structure, which provides the framework for programs involving a given commodity. When combined with the standard CCDR cost categories (e.g., functional categories and cost elements), the WBS provides the needed consistency and comparability essential to developing normalized databases for cost-estimating purposes. Generally, the plan should be limited to the minimum number of WBS elements needed for estimating. Use the least number of line items needed to estimate costs. Reporting should generally be at level 3 of the contract WBS but may be *selectively* extended for high risk, high dollar value, or high technological interest elements that warrant separate reporting with CAIG approval. Refer to Chapter 2 of the Manual for more detailed guidance.



COST DATA REPORTING PLAN	The public reporting burden for this collection of information is estimated to average per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ADDRESS.	*Form Approved OMB No. 0704-0188*

1. WEAPON SYSTEM TYPE	2. PROGRAM	3. SUBMISSION TYPE	4. WBS
		☐ INITIAL SUBMISSION ☐ CHANGE	☐ PROGRAM ☐ CONTRACT

5. DATA AS OF	7. REVIEW AND REFERENCE NUMBER	9. LOCATION	b. TELEPHONE NUMBER *(Include Area Code)*
		a. ADDRESS *(Include ZIP Code)*	c. FAX NUMBER
6. REPORT DATE	8. PREPARED BY		d. E-MAIL ADDRESS

10. WBS LEVEL	11. BREAKDOWN STRUCTURE ELEMENTS	12. CONTRACTOR (DUNS CODE)	13. CONTRACT NUMBER	14. REPORT MEDIA	15. REPORT FREQUENCY							
					a. DD FORM 1921		b. DD FORM 1921-1		c. DD FORM 1921-2		d. DD FORM 1921-3	
					FREQ.	DATE	FREQ.	DATE	FREQ.	DATE	FREQ.	DATE
	S A M P L E											

DD FORM 2794, APR 1999

WHS/DIOR, Mar 99

Figure 2. CCDR Plan Format

C3.1.1. Data Elements

The following paragraphs describe the data elements of the CCDR Plan. The numbers in parentheses are the maximum numbers of characters the elements can contain. Note that Figure 2 does not show the last two items described here (Paragraphs C3.1.1.16, Data Definition, and C3.1.1.17, Remarks). They are “memo” entries in the electronic version.

C3.1.1.1. Item 1. Weapon System Type (40 characters)

This data element is used to identify the weapon system type. The possible weapon system types as they are currently categorized in the central repository system are listed below. (However, a new weapon system type structure based on MIL-HDBK-881 and logical extensions thereof is currently being developed to replace the existing structure.)

- Airborne Electronics
- Avionics
- C3l
- Engines
- Fixed Wing Aircraft
- Ground Electronics
- Helicopters
- Mines
- Missiles
- Ordnance
- Rocket Motors
- Remotely Piloted Vehicles (RPVs)
- Shipboard Electronics
- Ships
- Simulators
- Space Systems
- Wheeled & Tracked Vehicles
- Others

C3.1.1.2. Item 2. Program (40 characters)

This data element is a free-form description to identify by name, mission, design, series or other military designation the prime item purchased on the contract. If the

contract is for services or level of effort (research, flight test, etc.), show the title of the service.

C3.1.1.3. Item 3. Submission Type (1 character)

This data element identifies the type of CCDR Plan:

I—initial submission.

C—proposed change to the last approved Plan.

C3.1.1.4. Item 4. WBS (1 character)

This data element indicates the type of WBS:

P—program WBS.

C—contract WBS.

See Paragraph C2.2.3.3, WBS, for a description of the program and contract WBS.

C3.1.1.5. Item 5. Data As Of (10 characters)

The “as of” date is the date of the most recent data to be submitted in the Plan. The date format is mm-dd-year (e.g., 10-15-1997 for October 15, 1997).

C3.1.1.6. Item 6. Report Date (10 characters)

The report date is the date the preparing organization submitted the Plan. The date format is mm-dd-year (e.g., 11-20-1997 for November 20, 1997).

C3.1.1.7. Item 7. Review and Reference Number (25 characters)

The CCDR-PO assigns a reference number after review and approval. This number serves as the reference point for future submissions and changes.

Leave this data element blank for the initial submission.

C3.1.1.8. Item 8. Prepared By (45 characters)

Enter the name of the organization that prepared the plan.

C3.1.1.9. Item 9. Location (187 characters total)

Enter the name of the point of contact (POC), the address of the preparing organization, and other relevant information as follows:

- POC (40 characters),
- Street (40 characters),
- City (20 characters),
- State (2 characters),

- Zip (10 characters),
- Telephone (15 characters),
- Fax (15 characters), and
- E-mail (45 characters).

C3.1.1.10. Item 10. WBS Level (10 characters)

Enter the WBS level in accordance with MIL-HDBK-881.

C3.1.1.11. Item 11. Breakdown Structure Elements (60 characters)

This item can be a free-form description of the reporting elements.

C3.1.1.12. Item 12. Contractor (Duns Code) (10 characters)

Leave this item blank for the initial submission. Enter the standard contractor abbreviation or Duns Code when the contractor is selected.

C3.1.1.13. Item 13. Contract Number (20 characters)

Enter the code used to identify the current or existing contract.

C3.1.1.14. Item 14. Report Media (3 characters)

Indicate the type of media required for sending reports using the following codes:

FD—floppy disk.

SI—secure Internet.

VA—VAN line.

C3.1.1.15. Item 15. Report Frequency (2 characters) & Date (10 characters)

Enter the report frequency and the as of dates for each report (DoD Forms 1921, 1921-1, 1921-2, and 1921-3), which should agree with the planned CDRL information. Use the following codes to reflect reporting frequency.

S—report semiannually (for historical program).

A—report annually.

CC—report at contract completion.

LC—report at lot completion.

UC—report at unit completion.

AR—report as required.

Note: If a specific date(s) will be specified in the CDRL to trigger reporting, use AR for reporting frequency and enter the particular date(s). If the CDRL will specify an

event rather than a date to trigger reporting, use AR for reporting frequency, leave the date field blank, and note the event(s) and planned date(s) in the Remarks section.

C3.1.1.16. Data Definition (memo)

Enter the definition for the corresponding WBS element.

C3.1.1.17. Remarks (memo)

In this field, enter a description of your data plan and any other remarks necessary.

C3.1.2. Database Structure

The data elements just described are aggregated and normalized into two tables in the database—Header and WBS. These tables are related by sequence number, as Figure 3 depicts.

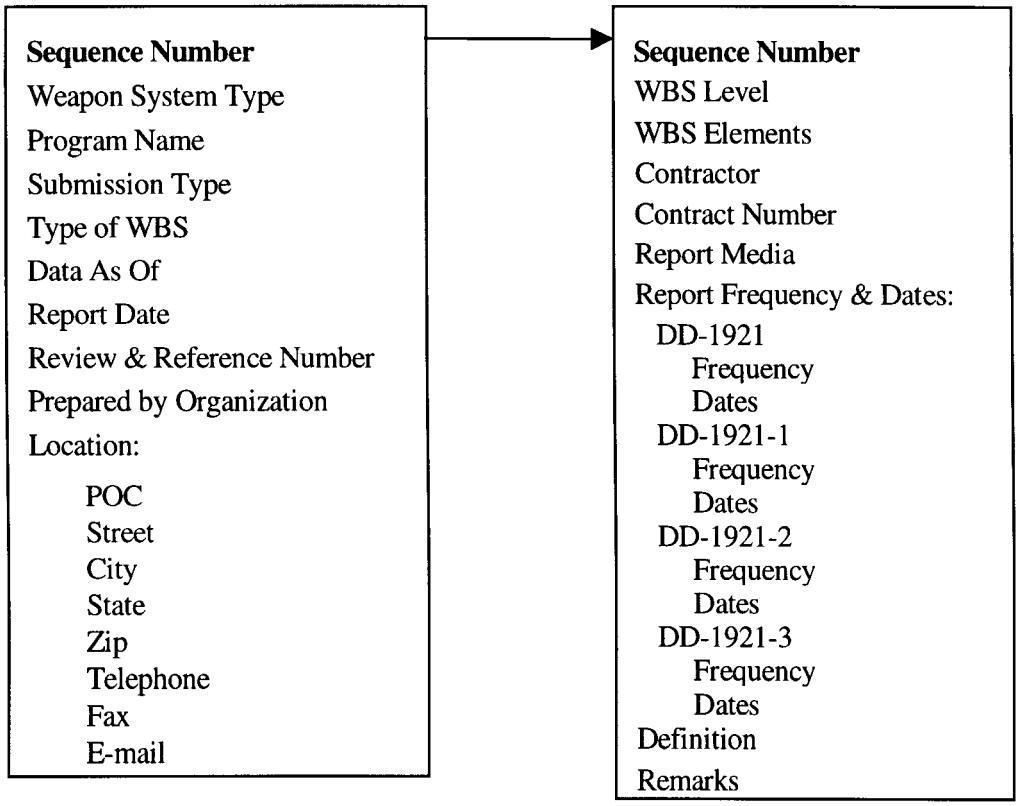


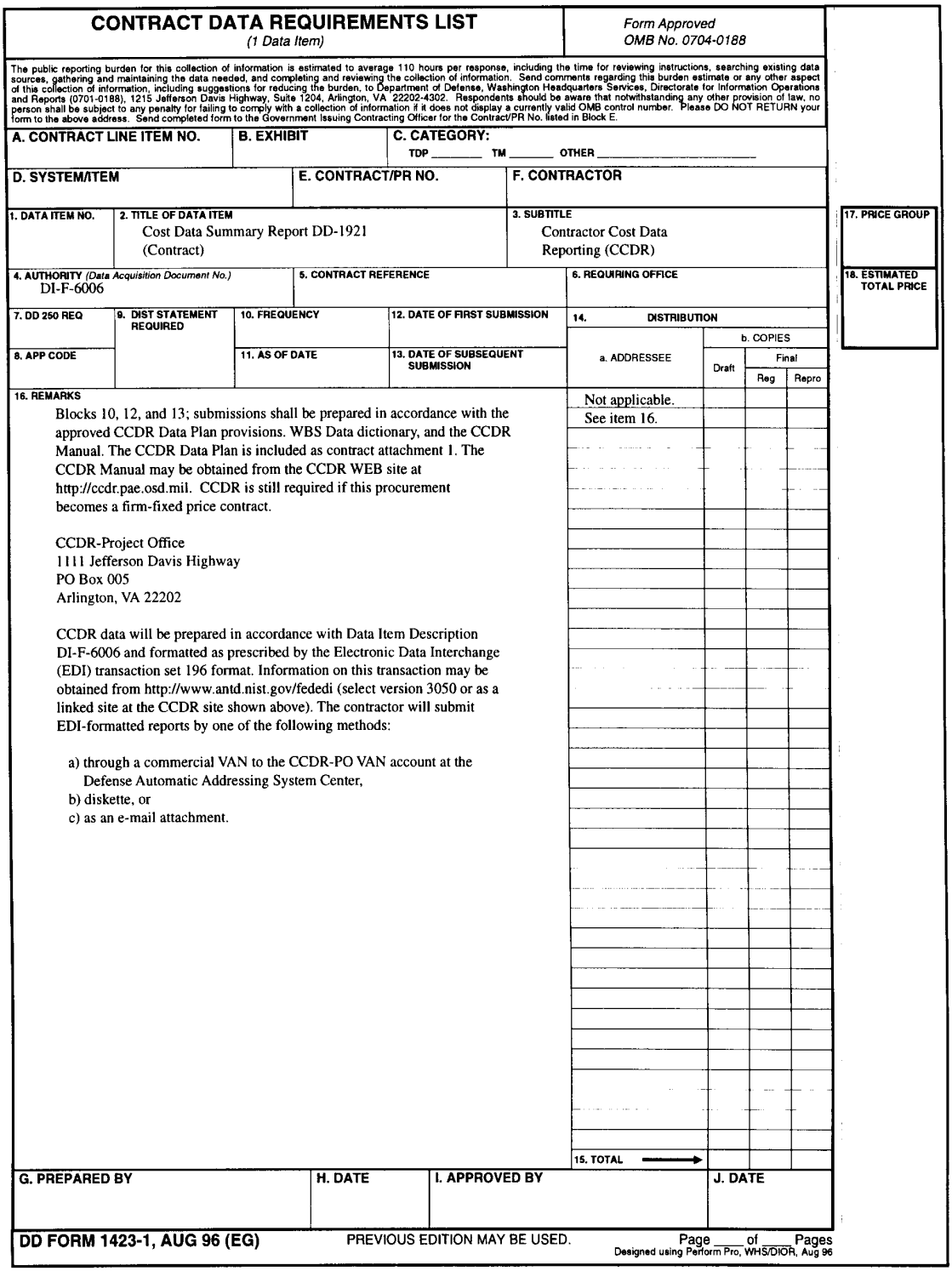
Figure 3. Relationship of Header and WBS Tables

C3.1.3. Development of Supporting Software

The CCDR-PO has developed software to electronically prepare the CCDR Plan. The software is available on the CCDR web page (http://ccdr.pae.osd.mil). DoD program managers (PMs) are encouraged to share the results of the CCDR Plan with the contractors' representatives on the Cost Integrated Product Team (CIPT).

C3.2. PLACING CCDR REQUIREMENTS ON CONTRACT

The CCDR planning process culminates in contract award. The CDRL identifies specific CCDR requirements for development and production contracts. A separate CDRL item is prepared for each of the four CCDR reports shown in Figures 4 through 7. A detailed description of each report's content and formatting instructions are included in the four data item descriptions (DIDs) depicted in Figures 8 through 11.



CONTRACT DATA REQUIREMENTS LIST
(1 Data Item)

Form Approved
OMB No. 0704-0188

The public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0701-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. Please DO NOT RETURN your form to the above address. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

A. CONTRACT LINE ITEM NO.	B. EXHIBIT	C. CATEGORY: TDP _____ TM _____ OTHER _____
D. SYSTEM/ITEM	E. CONTRACT/PR NO.	F. CONTRACTOR

1. DATA ITEM NO.	2. TITLE OF DATA ITEM	3. SUBTITLE	17. PRICE GROUP
	Cost Data Summary Report DD-1921 (Contract)	Contractor Cost Data Reporting (CCDR)	18. ESTIMATED TOTAL PRICE

4. AUTHORITY *(Data Acquisition Document No.)*	5. CONTRACT REFERENCE	6. REQUIRING OFFICE
DI-F-6006		

7. DD 250 REQ	9. DIST STATEMENT REQUIRED	10. FREQUENCY	12. DATE OF FIRST SUBMISSION
8. APP CODE		11. AS OF DATE	13. DATE OF SUBSEQUENT SUBMISSION

16. REMARKS

Blocks 10, 12, and 13; submissions shall be prepared in accordance with the approved CCDR Data Plan provisions. WBS Data dictionary, and the CCDR Manual. The CCDR Data Plan is included as contract attachment 1. The CCDR Manual may be obtained from the CCDR WEB site at http://ccdr.pae.osd.mil. CCDR is still required if this procurement becomes a firm-fixed price contract.

CCDR-Project Office
1111 Jefferson Davis Highway
PO Box 005
Arlington, VA 22202

CCDR data will be prepared in accordance with Data Item Description DI-F-6006 and formatted as prescribed by the Electronic Data Interchange (EDI) transaction set 196 format. Information on this transaction may be obtained from http://www.antd.nist.gov/fededi (select version 3050 or as a linked site at the CCDR site shown above). The contractor will submit EDI-formatted reports by one of the following methods:

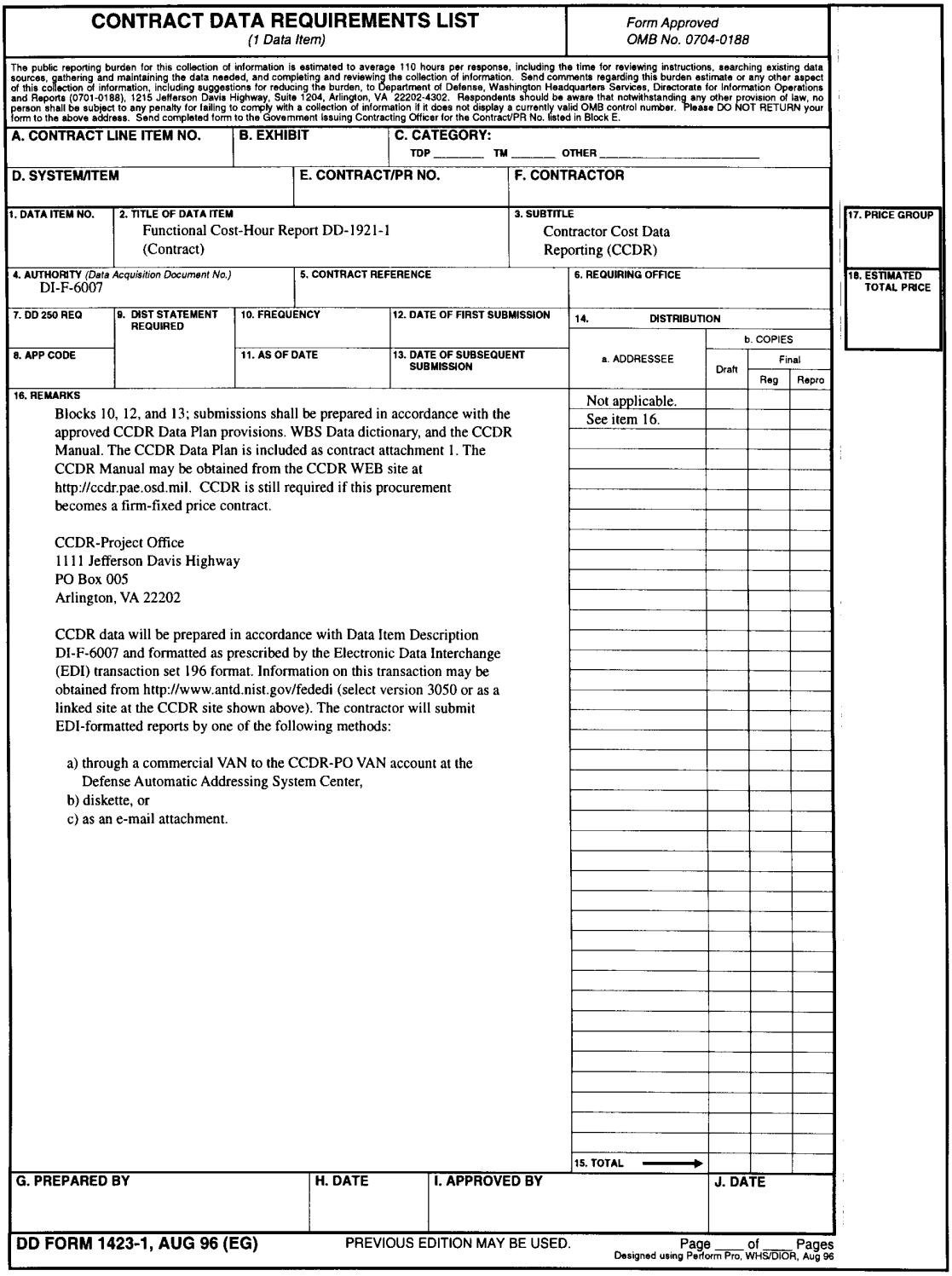
a) through a commercial VAN to the CCDR-PO VAN account at the Defense Automatic Addressing System Center,
b) diskette, or
c) as an e-mail attachment.

14. DISTRIBUTION	b. COPIES		
a. ADDRESSEE	Draft	Final Reg	Final Repro
Not applicable.			
See item 16.			
15. TOTAL →			

G. PREPARED BY	H. DATE	I. APPROVED BY	J. DATE

DD FORM 1423-1, AUG 96 (EG) PREVIOUS EDITION MAY BE USED. Page ___ of ___ Pages
Designed using Perform Pro, WHS/DIOR, Aug 96

Figure 4. CDRL Item for the Cost Data Summary Report (DD Form 1921)



CONTRACT DATA REQUIREMENTS LIST
(1 Data Item)

Form Approved
OMB No. 0704-0188

The public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0701-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. Please DO NOT RETURN your form to the above address. Send completed form to the Government issuing Contracting Officer for the Contract/PR No. listed in Block E.

A. CONTRACT LINE ITEM NO.	B. EXHIBIT	C. CATEGORY: TDP _____ TM _____ OTHER _____
D. SYSTEM/ITEM	E. CONTRACT/PR NO.	F. CONTRACTOR

1. DATA ITEM NO.	2. TITLE OF DATA ITEM	3. SUBTITLE	17. PRICE GROUP
	Functional Cost-Hour Report DD-1921-1 (Contract)	Contractor Cost Data Reporting (CCDR)	

4. AUTHORITY *(Data Acquisition Document No.)*	5. CONTRACT REFERENCE	6. REQUIRING OFFICE	18. ESTIMATED TOTAL PRICE
DI-F-6007			

7. DD 250 REQ	9. DIST STATEMENT REQUIRED	10. FREQUENCY	12. DATE OF FIRST SUBMISSION
8. APP CODE		11. AS OF DATE	13. DATE OF SUBSEQUENT SUBMISSION

16. REMARKS

Blocks 10, 12, and 13; submissions shall be prepared in accordance with the approved CCDR Data Plan provisions. WBS Data dictionary, and the CCDR Manual. The CCDR Data Plan is included as contract attachment 1. The CCDR Manual may be obtained from the CCDR WEB site at http://ccdr.pae.osd.mil. CCDR is still required if this procurement becomes a firm-fixed price contract.

CCDR-Project Office
1111 Jefferson Davis Highway
PO Box 005
Arlington, VA 22202

CCDR data will be prepared in accordance with Data Item Description DI-F-6007 and formatted as prescribed by the Electronic Data Interchange (EDI) transaction set 196 format. Information on this transaction may be obtained from http://www.antd.nist.gov/fededi (select version 3050 or as a linked site at the CCDR site shown above). The contractor will submit EDI-formatted reports by one of the following methods:

a) through a commercial VAN to the CCDR-PO VAN account at the Defense Automatic Addressing System Center,
b) diskette, or
c) as an e-mail attachment.

14. DISTRIBUTION	b. COPIES		
a. ADDRESSEE	Draft	Final Reg	Final Repro
Not applicable.			
See item 16.			

CONTRACT DATA REQUIREMENTS LIST

(1 Data Item)

Form Approved
OMB No. 0704-0188

The public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0701-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. Please DO NOT RETURN your form to the above address. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

A. CONTRACT LINE ITEM NO.	B. EXHIBIT	C. CATEGORY: TDP _____ TM _____ OTHER _____
D. SYSTEM/ITEM	E. CONTRACT/PR NO.	F. CONTRACTOR

1. DATA ITEM NO.	2. TITLE OF DATA ITEM	3. SUBTITLE	17. PRICE GROUP
	Progress Curve Report DD-1921-2 (Contract)	Contractor Cost Data Reporting (CCDR)	

4. AUTHORITY *(Data Acquisition Document No.)*	5. CONTRACT REFERENCE	6. REQUIRING OFFICE	18. ESTIMATED TOTAL PRICE
DI-F-6008			

7. DD 250 REQ	9. DIST STATEMENT REQUIRED	10. FREQUENCY	12. DATE OF FIRST SUBMISSION
8. APP CODE		11. AS OF DATE	13. DATE OF SUBSEQUENT SUBMISSION

16. REMARKS

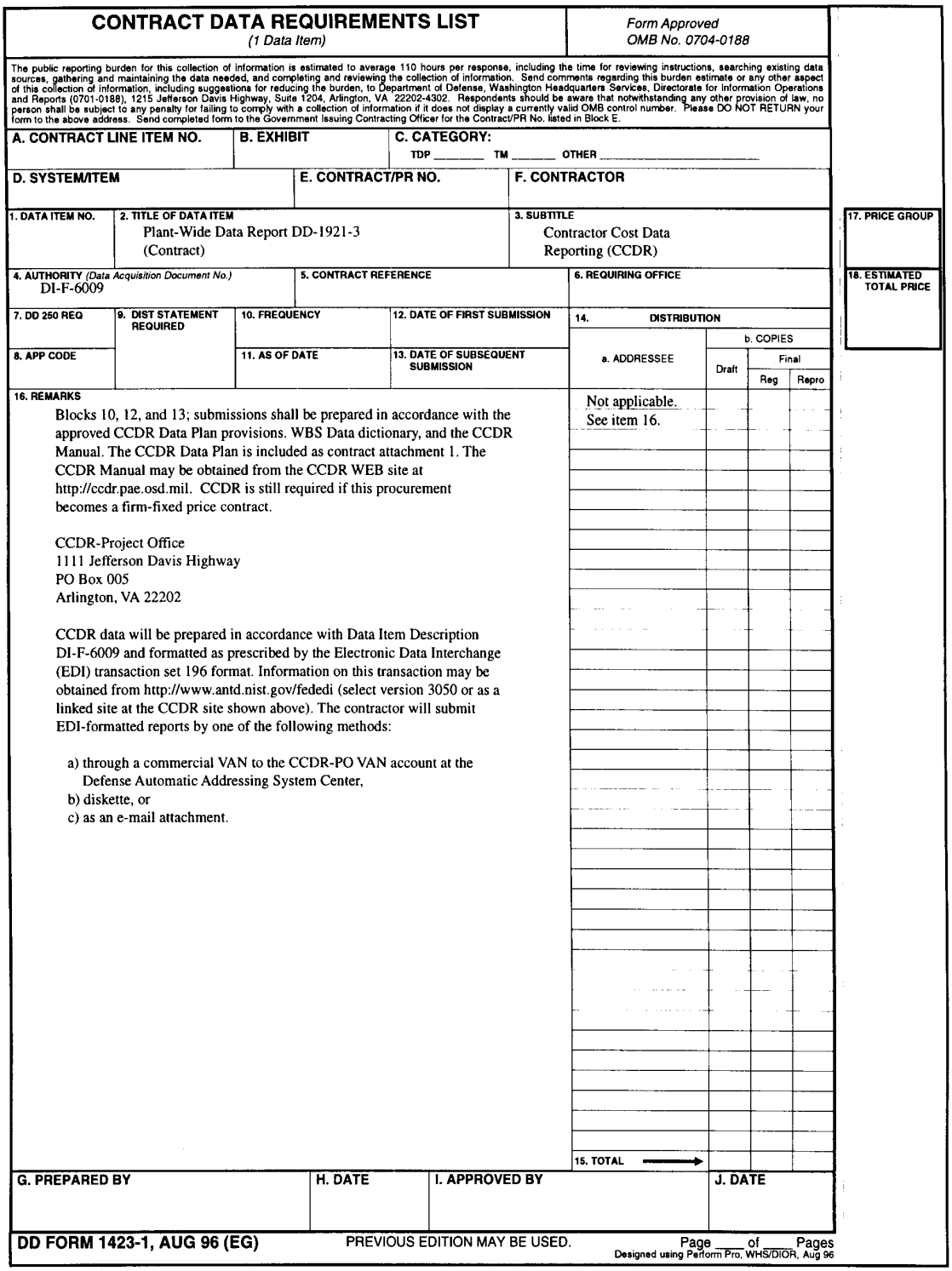
Blocks 10, 12, and 13; submissions shall be prepared in accordance with the approved CCDR Data Plan provisions. WBS Data dictionary, and the CCDR Manual. The CCDR Data Plan is included as contract attachment 1. The CCDR Manual may be obtained from the CCDR WEB site at http://ccdr.pae.osd.mil. CCDR is still required if this procurement becomes a firm-fixed price contract.

CCDR-Project Office
1111 Jefferson Davis Highway
PO Box 005
Arlington, VA 22202

CCDR data will be prepared in accordance with Data Item Description DI-F-6008 and formatted as prescribed by the Electronic Data Interchange (EDI) transaction set 196 format. Information on this transaction may be obtained from http://www.antd.nist.gov/fededi (select version 3050 or as a linked site at the CCDR site shown above). The contractor will submit EDI-formatted reports by one of the following methods:

a) through a commercial VAN to the CCDR-PO VAN account at the Defense Automatic Addressing System Center,
b) diskette, or
c) as an e-mail attachment.

14. DISTRIBUTION	b. COPIES		
a. ADDRESSEE	Draft	Final Reg	Final Repro
Not applicable.			
See item 16.			



CONTRACT DATA REQUIREMENTS LIST
(1 Data Item)

Form Approved
OMB No. 0704-0188

The public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0701-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. Please DO NOT RETURN your form to the above address. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

A. CONTRACT LINE ITEM NO.	B. EXHIBIT	C. CATEGORY: TDP _____ TM _____ OTHER _____

D. SYSTEM/ITEM	E. CONTRACT/PR NO.	F. CONTRACT

1. DATA ITEM NO.	2. TITLE OF DATA ITEM	3. SUBTITLE	17. PRICE GROUP
	Plant-Wide Data Report DD-1921-3 (Contract)	Contractor Cost Data Reporting (CCDR)	

4. AUTHORITY *(Data Acquisition Document No.)*	5. CONTRACT REFERENCE	6. REQUIRING OFFICE	18. ESTIMATED TOTAL PRICE
DI-F-6009			

7. DD 250 REQ	9. DIST STATEMENT REQUIRED	10. FREQUENCY	12. DATE OF FIRST SUBMISSION	14. DISTRIBUTION			
				a. ADDRESSEE	b. COPIES		
8. APP CODE		11. AS OF DATE	13. DATE OF SUBSEQUENT SUBMISSION		Draft	Final	
						Reg	Repro
				Not applicable. See item 16.			

16. REMARKS

Blocks 10, 12, and 13; submissions shall be prepared in accordance with the approved CCDR Data Plan provisions. WBS Data dictionary, and the CCDR Manual. The CCDR Data Plan is included as contract attachment 1. The CCDR Manual may be obtained from the CCDR WEB site at http://ccdr.pae.osd.mil. CCDR is still required if this procurement becomes a firm-fixed price contract.

CCDR-Project Office
1111 Jefferson Davis Highway
PO Box 005
Arlington, VA 22202

CCDR data will be prepared in accordance with Data Item Description DI-F-6009 and formatted as prescribed by the Electronic Data Interchange (EDI) transaction set 196 format. Information on this transaction may be obtained from http://www.antd.nist.gov/fededi (select version 3050 or as a linked site at the CCDR site shown above). The contractor will submit EDI-formatted reports by one of the following methods:

a) through a commercial VAN to the CCDR-PO VAN account at the Defense Automatic Addressing System Center,
b) diskette, or
c) as an e-mail attachment.

15. TOTAL →

G. PREPARED BY	H. DATE	I. APPROVED BY	J. DATE

DD FORM 1423-1, AUG 96 (EG) PREVIOUS EDITION MAY BE USED. Page ____ of ____ Pages
Designed using Perform Pro, WHS/DIOR, Aug 96

Figure 7. CDRL Item for the Plant-Wide Data Report (DD Form 1921-3)

DATA ITEM DESCRIPTION

Form Approved
OMB NO. 0704-0188

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.

1. TITLE	2. IDENTIFICATION NUMBER
Cost Data Summary Report (DD 1921)	DI-F-6006

3. DESCRIPTION/PURPOSE

The Cost Data Summary Report aggregates actual incurred costs and estimated incurred costs at completion with the number of units being procured against WBS elements (typically down to the contract WBS level 3) and categorizes them as either recurring or nonrecurring costs. The overhead portion of indirect costs is included in each WBS element. However, the G&A portion of indirect costs along with other miscellaneous items (such as undistributed budget, management reserve, facilities cost of money), and profit or fee are not included in the WBS element costs and are reported separately at the bottom of the report. The report becomes part of the cost database that is used to prepare program cost estimates for major system acquisitions reviewed by the Defense Acquisition Board (DAB) and other Component reviewed programs. It is also used to develop independent government contract cost estimates in support of cost and price analyses.

4. APPROVAL DATE (YYMMDD)	5. OFFICE OF PRIMARY RESPONSIBILITY (OPR)	6a. DTIC APPLICABLE	6b. GIDEP APPLICABLE
731105	OD/PA&E/CAIG		

7. APPLICATION/INTERRELATIONSHIP

This Data Item Description (DID) summarizes the format and content preparation instructions to support the specific data and frequency requirements specified in the contract. The DD 1921 is one of four Contractor Cost Data Reporting (CCDR) formats that are used to support the DoD cost estimating process. This report is related to and may be required on the same contract along with the other three reports, the Functional Cost-Hour Report, DD 1921-1, (DID DI-F-6007), the Progress Curve Report, DD 1921-2, (DID DI-F-6008), and the Plant-Wide Data Report, DD 1921-3, (DID DI-F-6009).

The DD 1921 report can be used for any ACAT program contracts that exceed $40 million (FY 1996 constant dollars). However, the report may also be used on selected high risk or high technological interest contracts valued between $6 million and $40 million (FY 1996 Constant dollars) when justified and approved in the CCDR Plan. Reporting typically begins in the Program Definition and Risk Reduction Phase when the program includes advanced development prototype efforts, and continues through the Engineering and Manufacturing Development and Production Phases. Reporting frequency is tied directly to program decision making needs as determined by the program manager and the Cost Integrated Product Team for ACAT 1 programs and the program manager and the responsible Component reviewing authority for ACAT II and III programs.

8. APPROVAL LIMITATION	9a. APPLICABLE FORMS	9b. AMSC NUMBER
		AMSL No. 71556

10. PREPARATION INSTRUCTIONS

The contractor shall prepare deliverable reports in accordance with the instructions contained in Chapter 4 (Contractor Instructions), Chapter 5 (Cost Data Elements Definitions), and, if applicable, Appendix A (Special Instructions) of the CCDR Manual.

The contract will require that reports be submitted electronically or in hard copy in accordance with Chapter 2 of the CCDR Manual.

11. DISTRIBUTION STATEMENT

Distribution Statement A: Approved for public release; distribution is unlimited.

DD Form 1664, APR 89 *Previous editions are obsolete* Page 1 of 1

Figure 8. DID for the Cost Data Summary Report (DD Form 1921)

DATA ITEM DESCRIPTION

Form Approved
OMB NO. 0704-0188

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.

1. TITLE	2. IDENTIFICATION NUMBER
Functional Cost-Hour Report (DD 1921-1)	DI-F-6007

3. DESCRIPTION/PURPOSE

This report displays actual costs by functional category (i.e., engineering, tooling, quality control, manufacturing, and other). Each functional area is broken out by direct labor hours and by cost category (e.g., direct labor, material, overhead). General and administrative (G&A) expenses and profits or fees are reported separately at the bottom of the report. For ACAT II and III programs, there is a special section that is available for providing summary-level plant-wide data in lieu of the Plant-Wide Data Report (1921-3).

The report becomes part of the cost database that is used to prepare program cost estimates for major system acquisitions reviewed by the Defense Acquisition Board (DAB) and other Component reviewed programs. It is also used to develop independent government contract cost estimates in support of cost and price analyses.

4. APPROVAL DATE (YYMMDD)	5. OFFICE OF PRIMARY RESPONSIBILITY (OPR)	6a. DTIC APPLICABLE	6b. GIDEP APPLICABLE
731105	OD/PA&E/CAIG		

7. APPLICATION/INTERRELATIONSHIP

This Data Item Description (DID) summarizes the format and content preparation instructions to support the specific data and frequency requirements specified in the contract. The DD 1921-1 is one of four Contractor Cost Data Reporting (CCDR) formats that are used to support the DoD cost estimating process. This report is related to and may be required on the same contract along with the other three reports, the Cost Data Summary Report, DD 1921, (DID DI-F-6006), the Progress Curve Report, DD 1921-2, (DID DI-F-6008), and the Plant-Wide Data Report, DD 1921-3, (DID DI-F-6009).

The DD 1921-1 is used for ACAT I, II, and III program contracts that typically exceed $40 million (FY 1996 constant dollars). However, the report may also be used on selected high risk or high technological interest contracts valued between $6 million and $40 million (FY 1996 Constant dollars) when justified and approved in the CCDR Plan. Reporting typically begins in the Program Definition and Risk Reduction Phase when the program includes advanced development prototype efforts, and continues through the Engineering and Manufacturing Development and Production Phases. Reporting frequency is tied directly to program decision making needs as determined by the program manager and the Cost Integrated Product Team for ACAT I programs and the program manager and the responsible Component reviewing authority for ACAT II and III programs.

8. APPROVAL LIMITATION	9a. APPLICABLE FORMS	9b. AMSC NUMBER
		AMSL No. 71556

10. PREPARATION INSTRUCTIONS

The contractor shall prepare deliverable reports in accordance with the instructions contained in Chapter 4 (Contractor Instructions), Chapter 5 (Cost Data Elements Definitions), and, if applicable, Appendix A (Special Instructions) of the CCDR Manual.

The contract will require that reports be submitted electronically or in hard copy in accordance with Chapter 2 of the CCDR Manual.

11. DISTRIBUTION STATEMENT

Distribution Statement A: Approved for public release; distribution is unlimited.

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Figure 9. DID for the Functional Cost-Hour Report (DD Form 1921-1)

DATA ITEM DESCRIPTION

Form Approved
OMB NO. 0704-0188

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.

1. TITLE	2. IDENTIFICATION NUMBER
Progress Curve Report (DD 1921-2)	DI-F-6008

3. DESCRIPTION/PURPOSE

The Progress Curve Report (DD Form 1921-2) shows, for selected reporting elements only actual and estimated to complete recurring costs (only) by unit or lot. The report also shows direct labor hours for quality control and manufacturing. Costs and hours are segregated by reporting contractor, subcontractor, and total. Within these categories, costs are further subdivided by major manufacturing cost category to include quality control, manufacturing, raw material and purchased parts, and purchased equipment. For ACAT II and III programs, there is a special section that is available for providing summary-level plant-wide data in lieu of the Plant-Wide Data Report (DD 1921-3).

The report becomes part of the cost database that is used to prepare program cost estimates for major system acquisitions reviewed by the Defense Acquisition Board (DAB) and other Component reviewed programs. It is also used to develop independent government contract cost estimates in support of cost and price analyses. Specifically, the report data are used to develop progress or learning curves.

4. APPROVAL DATE (YYMMDD)	5. OFFICE OF PRIMARY RESPONSIBILITY (OPR)	6a. DTIC APPLICABLE	6b. GIDEP APPLICABLE
731105	OD/PA&E/CAIG		

7. APPLICATION/INTERRELATIONSHIP

This Data Item Description (DID) summarizes the format and content preparation instructions to support the specific data and frequency requirements specified in the contract. The DD 1921-2 is one of four Contractor Cost Data Reporting (CCDR) formats that are used to support the DoD cost estimating process. This report is related to and may be required on the same contract along with the other three reports, the Cost Data Summary Report, DD 1921, (DID DI-F-6006), the Functional Cost-Hour Report, DD 1921-1, (DID DI-F-6007), and the Plant-Wide Data Report, DD 1921-3, (DID DI-F-6009).

The DD 1921-2 is used for ACAT I, II, and III program contracts that typically exceed $40 million (FY 1996 constant dollars). However, the report may also be used on selected high risk or high technological interest contracts valued between $6 million and $40 million (FY 1996 Constant dollars) when justified and approved in the CCDR Plan. Reporting typically begins in the Program Definition and Risk Reduction Phase when the program includes advanced development prototype efforts, and continues through the Engineering and Manufacturing Development and Production Phases. Reporting frequency is tied directly to program decision making needs as determined by the program manager and the Cost Integrated Product Team for ACAT I programs and the program manager and the responsible Component reviewing authority for ACAT II and III programs.

8. APPROVAL LIMITATION	9a. APPLICABLE FORMS	9b. AMSC NUMBER
		AMSL No. 71556

10. PREPARATION INSTRUCTIONS

The contractor shall prepare deliverable reports in accordance with the instructions contained in Chapter 4 (Contractor Instructions), Chapter 5 (Cost Data Elements Definitions), and, if applicable, Appendix A (Special Instructions) of the CCDR Manual.

The contract will require that reports be submitted electronically or in hard copy in accordance with Chapter 2 of the CCDR Manual.

11. DISTRIBUTION STATEMENT

Distribution Statement A: Approved for public release; distribution is unlimited.

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Figure 10. DID for the Progress Curve Report (DD Form 1921-2)

DATA ITEM DESCRIPTION

Form Approved
OMB NO. 0704-0188

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.

1. TITLE	2. IDENTIFICATION NUMBER
Plant-Wide Data Report (DD 1921-3)	DI-F-6009

3. DESCRIPTION/PURPOSE

The Plant-Wide Data Report (DD 1921-3) is an annual report that provides summary level information on all business in a given plant. The report contains three major sections that accumulate data for the previous fiscal year (FY), current FY, and each of the succeeding three FYs (applies to the contractor's FY).

Section A of the report identifies direct costs for each program by functional area (i.e., engineering, manufacturing, material, and other). Direct costs are typically used to allocate, on a pro-rata basis, plant overhead costs to specific cost objectives (e.g. DoD contracts). Section B lists indirect costs and employment by functional area (i.e., engineering, manufacturing, material, other, and G&A) and major cost element (e.g. indirect labor, employee benefits, and administration). Section C shows labor rates of direct employees by functional area (i.e., engineering, tooling, quality control, and manufacturing).

The report becomes part of the cost database that is used to prepare program cost estimates for major system acquisitions reviewed by the Defense Acquisition Board (DAB) and other Component reviewed programs. It is also used to develop independent government contract cost estimates in support of cost and price analyses. Specifically, the report data are used to estimate and apply overhead rates to generate cost estimates for future work.

4. APPROVAL DATE (YYMMDD)	5. OFFICE OF PRIMARY RESPONSIBILITY (OPR)	6a. DTIC APPLICABLE	6b. GIDEP APPLICABLE
731105	OD/PA&E/CAIG		

7. APPLICATION/INTERRELATIONSHIP

This Data Item Description (DID) summarizes the format and content preparation instructions to support the specific data and frequency requirements specified in the contract. The DD 1921-3 is one of four Contractor Cost Data Reporting (CCDR) formats that are used to support the DoD cost estimating process. This report is related to and may be required on the same contract along with the other three reports, the Cost Data Summary Report, DD 1921, (DID DI-F-6006), the Functional Cost-Hour Report, DD 1921-1, (DID DI-F-6007), and the Progress Curve Report, DD 1921-2, (DID DI-F-6008). The DD 1921-3 can be used for any ACAT I, II, or III program contracts. Only one annual report is prepared regardless of the number of contracts being executed within the plant. Copies of the report satisfy all CCDR requirements for all contracts.

Reporting typically begins in the Program Definition and Risk Reduction Phase when the program includes advanced development prototype efforts, and continues through the Engineering and Manufacturing Development and Production Phases. The requirement for submission of plant-wide data generally will continue as long as there is an active contract containing CCDR requirements.

8. APPROVAL LIMITATION	9a. APPLICABLE FORMS	9b. AMSC NUMBER
		AMSL No. 71556

10. PREPARATION INSTRUCTIONS

The contractor shall prepare deliverable reports in accordance with the instructions contained in Chapter 4 (Contractor Instructions), and Chapter 5 (Cost Data Elements Definitions) of the CCDR Manual.

The contract will require that reports be submitted electronically or in hard copy in accordance with Chapter 2 of the CCDR Manual.

11. DISTRIBUTION STATEMENT

Distribution Statement A: Approved for public release; distribution is unlimited.

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Figure 11. DID for the Plant-Wide Data Report (DD Form 1921-3)

C4. CHAPTER 4
CONTRACTOR INSTRUCTIONS

This chapter contains instructions to assist contractors in fulfilling the following reporting requirements:

- Cost Data Summary Report (DD Form 1921),
- Functional Cost-Hour Report (DD Form 1921-1),
- Progress Curve Report (DD Form 1921-2), and
- Plant-Wide Data Report (DD Form 1921-3).

C4.1. GENERAL APPLICATIONS

C4.1.1. Reporting Elements

Contractor cost data will be collected on reporting elements as specified in the request for proposal (RFP) or the contract as specified in the CCDR Plan. Reporting elements are any contract items on which data are to be collected. They primarily consist of WBS elements but can include such other subdivisions as general and administrative (G&A) expense and profit. The requirements for these reports should always be specified in the RFPs. Any one or more of the contractors (prime, associate, or subcontractor) may report on one or more of the reporting elements selected. Who does the reporting on an element should be based on the relative importance of that element to cost-estimating requirements and to the total contract effort.

C4.1.2. Report Submission

Contractors will submit the four CCDR reports showing actual and estimated contract costs at frequencies specified in the contract. For the Plant-Wide Data Report, the contract should always reflect an annual requirement whose reporting period coincides with the contractor's fiscal year. Reports will be prepared in accordance with the following guidelines and definitions:

- The criteria applicable to the selection of prime contractor(s) for reporting will also apply to the selection of subcontractors. Such subcontractors, whose contracts meet the dollar thresholds and other criteria as specified in Chapter 2 will have CCDR requirements included in their contract with the prime contractor. When reports are needed from subcontractors, it will be the prime or associate contractor's responsibility to incorporate such requirements into the affected contracts.

- The CCDR-PO encourages (but does not require) subcontractor reporting to the prime contractor to facilitate processing. However, as noted in Chapter 2, the ultimate decision for determining such submission is left to the prime and subcontractor. When subcontractors submit their CCDR reports directly to prime contractors, the prime incorporates the subcontractor's report into its own report and forwards the combined report(s) to the CCDR-PO. However, subcontractor reports may be submitted directly to the CCDR-PO if the prime and subcontractor cannot agree to reporting via the prime.

A subcontractor who is subject to CCDR requirements should follow the instructions in this chapter in the same manner as a prime contractor.

C4.2. GENERAL GUIDELINES

The following general guidelines apply to the preparation of the CCDR forms:

- Permission to deviate from the requirements to report data on the elements and in the frequency specified in the RFPs and contracts must be requested in writing from the procuring contracting officer (PCO). The PCO should, in turn, coordinate with the PM to ensure that such deviations are acceptable. The PM, in turn, is responsible for coordinating with the CIPT or designated analysts if CIPT is no longer in existence and obtaining appropriate approval from the CCDR-PO. Use the "Remarks" section on each form or a supplementary sheet to note approved deviations.
- Contractors must report all actual and estimated costs, regardless of contract ceiling or contract type (e.g., firm fixed price). This requirement may result in reported costs being higher than costs actually paid for by the government.
- All contractor data sources should be used. However, there will be occasions when the contractor cannot, without a major effort or major change to his accounting system, provide the data in the requested format. Under these circumstances (e.g., when a contractor's accounting system does not aggregate to a specified cost category), the contractor should provide a best estimate. The contractor should provide the basis for the estimate in the "Remarks" section of the appropriate report.
- When different models or variations of an end item are included in the same contract in separate contract line items, separate reports may be required on each. Whenever reporting is to be required on different models of a series, this requirement will be delineated in the RFP and in the contract. This requirement can be expected when there are significant cost or technical characteristic differences between the models.
- Each form contains a section for remarks. Use this section, and additional sheets as required, whenever the space provided is insufficient, or the contractor must deviate from the format or definitions. The instructions for a specific form may suggest the use of the "Remarks" section in certain instances.

- The contractors reporting to the DoD should note in the "Remarks" section of each appropriate report the names of subcontractors who have been designated to submit reports directly to DoD and corresponding purchase orders or subcontract numbers.
- The latest executive copy of DD Form 254 (Security Requirements Check List) will indicate the proper security classification. Reporting contractors must ensure that the proper security classification, within the meaning of the Espionage Act, has been assigned to each report. Such terms as SECRET and CONFIDENTIAL may not be used to describe the proprietary nature of data.
- DoD components will protect company information of a proprietary nature. All requests for CCDR information from any non-DoD governmental agency or organization will be processed through the CCDR Project Office.
- When no costs were incurred during a reporting period on which it is expected to report, the contractor will insert a zero (0) in the appropriate place on the form.

C4.3. CONTRACTOR COST DATA REPORTS

This section describes each of the four CCDR report formats and explains how the reporting contractor fills them out. The reporting contractor is any prime contractor, associate contractor, or subcontractor who is contractually required to submit CCDR reports.

C4.3.1. Cost Data Summary Report (DD Form 1921)

The Cost Data Summary Report (Figure 12) aggregates actual incurred costs and incurred costs at completion with units produced against WBS elements (typically down to the contract WBS level 3) and categorizes them as either recurring or nonrecurring costs. The overhead portion of indirect costs is included in each WBS element. However, the G&A portion of indirect costs along with other miscellaneous items (such as undistributed budget, management reserve, facilities cost of money), and profit or fee are not included in the WBS element costs and are reported separately at the bottom of the report. The Cost Data Summary Report can be used for ACAT I, ACAT II, and ACAT III program contracts as determined by the responsible program manager and the CIPT for ACAT I program contracts. The program manager and the responsible Component reviewing authority determine use for ACAT II and III program contracts.

For ACAT I contracts, Cost Data Summary Reports should be submitted for a contract estimate and, if required, a program estimate[4] in response to an RFP and after that as specified in the contract. The program manager and the CIPT review process determine these requirements during the CCDR planning phase.

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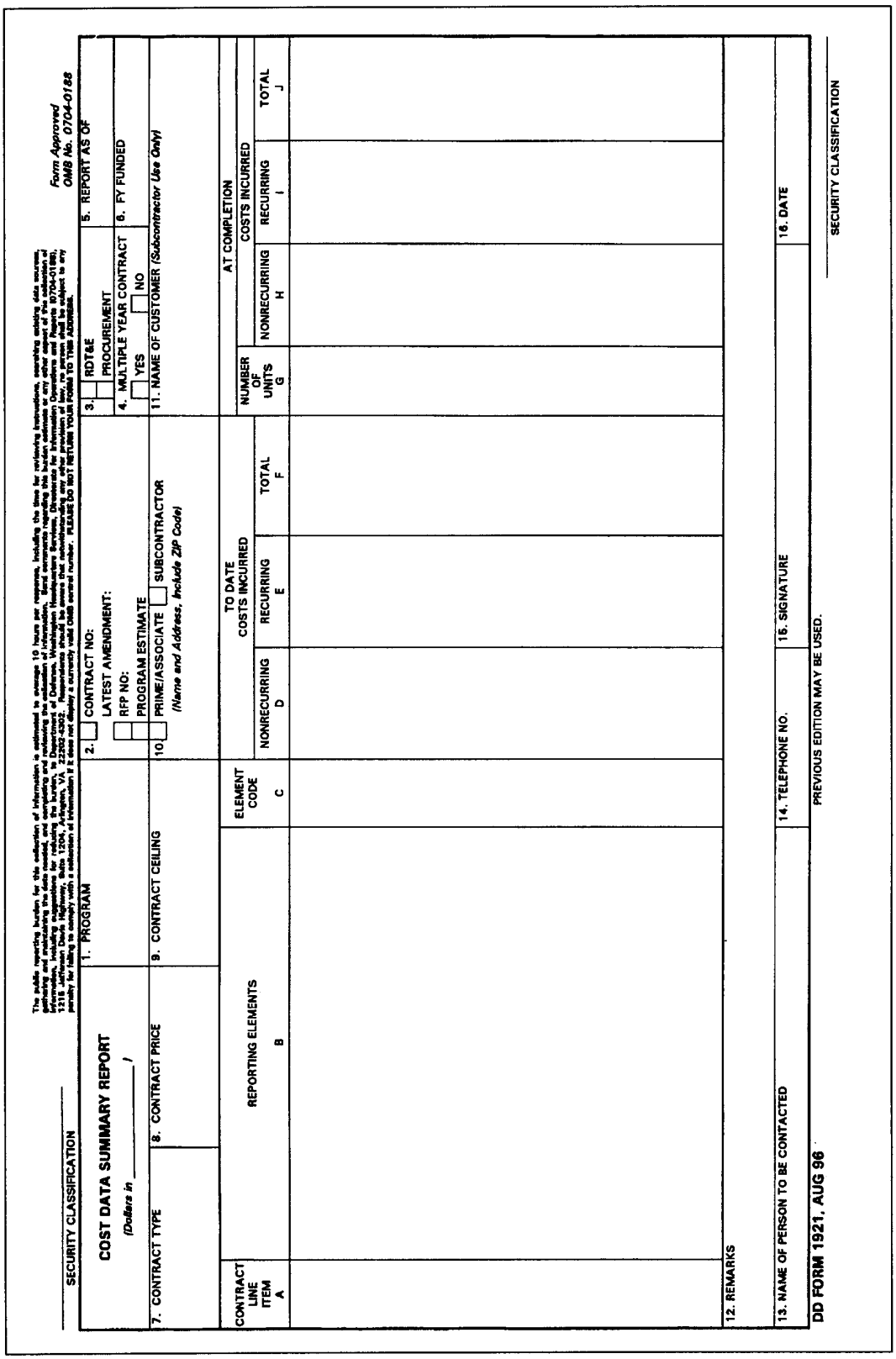
[4] A contractor's program estimate consists of all costs related to the total program as specified by the DoD component for that particular contractor. Although the program estimate will typically involve the costs for several different contracts, a contract estimate is only for one specified contract.



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The public reporting burden for this collection of information is estimated to average 10 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of the collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR FORM TO THIS ADDRESS.

Form Approved OMB No. 0704-0188

COST DATA SUMMARY REPORT

(Dollars in _____)

1. PROGRAM
2. ☐ CONTRACT NO: / LATEST AMENDMENT: / RFP NO: / PROGRAM ESTIMATE
3. ☐ RDT&E / ☐ PROCUREMENT
4. MULTIPLE YEAR CONTRACT ☐ YES ☐ NO
5. REPORT AS OF
6. FY FUNDED
7. CONTRACT TYPE
8. CONTRACT PRICE
9. CONTRACT CEILING
10. ☐ PRIME/ASSOCIATE ☐ SUBCONTRACTOR *(Name and Address, Include ZIP Code)*
11. NAME OF CUSTOMER *(Subcontractor Use Only)*

CONTRACT LINE ITEM A	REPORTING ELEMENTS B	ELEMENT CODE C	TO DATE COSTS INCURRED			AT COMPLETION			
						NUMBER OF UNITS G	COSTS INCURRED		
			NONRECURRING D	RECURRING E	TOTAL F		NONRECURRING H	RECURRING I	TOTAL J

12. REMARKS

13. NAME OF PERSON TO BE CONTACTED
14. TELEPHONE NO.
15. SIGNATURE
16. DATE

DD FORM 1921, AUG 96 PREVIOUS EDITION MAY BE USED.

SECURITY CLASSIFICATION

Figure 12. Cost Data Summary Report (DD Form 1921)

For submission of contractor's program estimates, submit separate 1921 reports for each fiscal year and for each appropriation when a program involves funding from RDT&E and procurement. All dollars related to the buy of a given fiscal year should be shown in the report for that year, regardless of the year of expenditure. Make separate line entries on the 1921 for items "on contract" and items "not on contract." "On contract" includes all dollars for items for which there is a signed contract between the contractor and the government plus any approved changes or modifications on which contractual agreement has been reached. "On Contract" also includes the dollars for items that the contractor has authorization to perform work on but that have not been priced. "Not on Contract" includes all additional dollars the contractor anticipates are required (e.g., expected change orders). It also includes changes to the program the DoD has specified to the contractor for possible future consideration but for which no contractual action has been initiated.

The following instructions apply to DD Form 1921, the Cost Data Summary Report. For contractor program estimates, leave Items 4, 7, and 8 blank, unless otherwise specified by the DoD Component.

C4.3.1.1. Item 1. Program

Enter the approved system designator or the type, model, and series of the prime end item(s) being purchased under contract or being proposed for contract. If the contract or proposal includes services (research, flight tests, etc.), provide details of the work to be performed. For associate contractors and subcontractors required to report separately, enter the end item being purchased on the contract and the program for which it is being procured (e.g., afterbody section of the F-X, wind tunnel tests for the B-X, launch equipment for missile X).

C4.3.1.2. Item 2. Contract Number or RFP Number

Check the box that most accurately describes the data being reported. If reporting on a contract estimate, enter the assigned contract number as well as the number of the latest contract amendment. If the data are in response to an RFP, enter the RFP number. For a program estimate, refer back to the second paragraph in Subsection C4.3.1.

C4.3.1.3. Item 3. RDT&E or Procurement

Check the appropriate box to indicate the type of appropriation (RDT&E or procurement) used to fund the contract. If funding other than RDT&E and procurement is used, do not check a box but note the specific type of funds in the "Remarks" section.

C4.3.1.4. Item 4. Multiple Year Contract

If the contract is funded from a single fiscal year, check the "NO" box and enter the specific fiscal year funding the contract in the "Remarks" section. However, if the report pertains to an incrementally funded research and development contract, check the "YES" box and enter all the fiscal years covered by the contract in the "Remarks" section.

In some cases, contractors may be operating under a multi-year contract that provides for annual increments of the quantities procured under the contract. This type of

contract is an example of multi-year procurement (MYP) and can be identified by the following characteristics:

- the government negotiates the contract for the quantities to be procured in more than one year,
- contract quantities are budgeted and financed in accordance with the program year for which each quantity is authorized; and
- funds are obligated only for the first year's quantity, with succeeding year's contract quantities funded annually thereafter. In the event funds are not made available to support one or more succeeding year's quantities, the contract will be cancelled. However, contractors are protected from loss by the terms of the contract cancellation ceiling clause.

For MYP contracts described above, check the "YES" box and enter the fiscal year of funding covered by the report.

You may be required to submit a separate report by type of funds and fiscal year on designated reporting elements.

C4.3.1.5. Item 5. Report As Of

Enter the last day, month, and year of the reporting period.

C4.3.1.6. Item 6. FY Funded

Enter the fiscal year for which data are being reported. If the contract being reported contains more than one fiscal year, show the first year in Item 6 and the remaining years in the "Remarks" section. If the data being reported are for program estimates, select from among the options of years to be covered below:

- prior fiscal years,
- fiscal year – 2,
- fiscal year – 1,
- current fiscal year,
- fiscal year + 1,
- fiscal year + 2,
- fiscal year + 3,
- fiscal year + 4,
- fiscal year + 5,
- fiscal year + 6,
- balance to complete, and
- total program.

Prior fiscal year, balance to complete, and total program values should always be included in contractor program estimates.

C4.3.1.7. Item 7. Contract Type

Enter the type of contract for which data are being reported. The contract types included in the Federal Acquisition Regulation (FAR) are listed in Table 2. Follow the instructions that correspond with contractual submission requirements.

- *EDI Reporting:* Each type of contract has been assigned an associated EDI contract code. Find the EDI code for the contract type for which you are reporting and enter it in the space provided. If the contract type is not in Table 2, enter the EDI contract code "OC" in the space provided. In addition, enter the name of the contract type in the "Remarks" section followed by the EDI code "OC". If the contract type selected is (CPIF), (CPIF/AF), (FPIF), or (FPIS), include a reference to the complete name of the contract type in the "Remarks" section.
- *Hardcopy Reporting:* Enter the type of contract from the table below for which data is being reported. If the contract type is not included in Table 2, enter the specific contract type in the space provided.

Table 2. EDI Code by FAR Contract Type

FAR Contract Types	EDI Code
Cost Reimbursement Contracts	
Cost Sharing (CS)	CH
Cost Plus Award Fee (CPAF)	CW
Cost Plus Fixed Fee (CPFF)	CX
Cost Plus Incentive Fee (CPIF)	CY
Cost Plus Incentive Fee (With Performance Incentives)	CA
Cost Plus Incentive Fee, Award Fee (CPIF/AF)[a]	CY
Fixed Price Contracts	
Firm Fixed Price (FFP)	FR
Fixed Price Incentive	FI
Fixed Price Incentive Successive (Targets) (FPIS)	FI
Fixed Price Incentive Successive Target (With Performance Incentive)	FF
Fixed Price Incentive Firm Target (With Performance Incentive)	FB
Fixed Price with Award Fee (FP/AF)	FH
Fixed Price with Economic Price Adjustment (FP/EPA)	FX
Fixed Price with Prospective Price Redetermination (FP/PRD)	FD
Fixed-Ceiling-Price with Retroactive Price Redetermination (FCP/RPR)	FM
Firm Fixed Price, Level of Effort Term (FFP/LOET)	FJ
Letter Contracts (LC)	OC

[a] This type of contract exists but is not included in the FAR.

C4.3.1.8. Item 8. Contract Price

Enter the total contract price value. If the contract is FFP, FP/EPA, FP/PRD, or FCP/RPR, enter the total negotiated cost and profit for work to be performed. For all incentive and cost contracts, enter the negotiated target costs, profit or fee and cost incentive arrangements (i.e., 70-30, 60-40) where applicable. Enter all incentive sharing arrangements using the "Remarks" section as necessary.

C4.3.1.9. Item 9. Contract Ceiling

Enter the currently defined contract ceiling amount where applicable.

C4.3.1.10. Item 10. Prime/Associate or Subcontractor

Check the Prime/Associate box if you are the prime or associate contractor for the work. If you are a subcontractor, check the Subcontractor box. Enter the name, division (if applicable), and address of the reporting prime contractor, associate contractor, or subcontractor in the space provided.

C4.3.1.11. Item 11. Name of Customer (Subcontractor Use Only)

If a subcontractor is submitting the report, enter the name of the customer for whom the work on contract is being performed. If a prime or associate contractor is submitting the report, leave this item blank.

C4.3.1.12. Column A. Contract Line Item

For each reporting element to be listed in column B there should be an associated Contract Line Item number specified in the contract. In the space provided, enter the contract line item number that relates to the individual reporting element in column B.

C4.3.1.13. Column B. Reporting Elements

Enter the WBS reporting elements specified in the contract or by the DoD Component for which cost data are to be reported. These reporting elements should match those listed in the approved CCDR Plan. The PM, in coordination with the CIPT, should incorporate all proposed reporting element changes in a revised CCDR Plan for review and approval by the CAIG before changing the contract or other reporting direction. Nevertheless, if there have been changes to the list of reporting elements that are not reflected in the contract or approved CCDR Plan, note these discrepancies in the "Remarks" section. Determination of recurring or nonrecurring costs should be made separately for each element being reported in column B, not at the system level.

C4.3.1.14. Column C. Element Code

Enter the element code designated by the procuring agency for the reporting element being reported in Column B. Typically, this code is used to identify the WBS structure and related indenture.

C4.3.1.15. Columns D, E, F, H, I, and J. Costs Incurred To Date and At Completion—Nonrecurring, Recurring and Total

The purpose of this information is to provide a detailed outline of contractor actual incurred costs and estimated incurred costs at completion. This is accomplished by segregating costs into three categories:

- *Nonrecurring costs*—"those elements of development and investment cost which generally occur only once in the life cycle of a weapon/support system."
- *Recurring costs*—"repetitive elements of development and investment costs that vary with the quantity being produced."
- *Total cost (cost incurred)*—"costs identified through the use of the accrual method of accounting and reporting or otherwise actually paid" and the sum of nonrecurring and recurring cost incurred.

For a more comprehensive definition of these terms, refer to Chapter 5.

Table 3 summarizes the reporting requirements of prime contractors for both their data and related subcontract data. Prime contractors must report both recurring and nonrecurring costs of subcontractors from whom they receive data. For subcontractors who instead report their recurring/nonrecurring split directly to DoD, primes need only show total costs. For subcontractors with no CCDR reporting requirements (referred to as nonreporting subcontractors); primes with CCDR reporting requirements must provide an estimated split between recurring and nonrecurring costs.

Table 3. Summary of Reported Form 1921 Data

Form 1921—Data Provided by Prime Contractors	Recurring Costs	Nonrecurring Costs	Total Costs
Prime contractor data	◆	◆	◆
Subcontractor data			
Subcontractors reporting to prime contractor	◆	◆	◆
Subcontractors reporting to DoD	❖	❖	◆
Nonreporting subcontractors	□	□	◆

◆ Available to and reported by prime contractor.
❖ Not reported by prime contractor (data available to DoD analysts only).
□ Estimated and reported by prime contractor.

In addition, use the following guidelines for each of the reporting elements in column B:

- For elements reported by subcontractors that do not have CCDR contractual requirements, include all costs except G&A.
- For elements that are reported to you separately, enter the incurred costs and estimates at completion as reported by the subcontractor.

- For elements that are separately reported to DoD, use price data from subcontractor billings and other relevant cost data for incurred costs to date (Column F) and the estimated price at completion for estimated incurred costs (Column J).

All the costs should be reported without regard to ceilings established for incentive contracts, or the price on firm fixed price contracts. When the total anticipated recurring or nonrecurring costs on a contract is estimated to be 95 percent or more of the total cost at contract completion, all cost data for each reporting element should be reported as either recurring or nonrecurring in Columns D or E and H or I, as appropriate. In these cases, the total contract split determines the breakout for each individual reporting element regardless of the actual recurring/nonrecurring split attributed to each element.

All reported data should reflect the reporting contractor's best estimate for performing currently authorized work plus any additional directed work for which execution or negotiation of amendments is pending. This also includes work not formally included in the contract price. These estimates will be used for planning purposes only and will not be binding on either the contractor or the DoD.

C4.3.1.16. Column G. Costs Incurred At Completion—Number of Units

Where appropriate, enter the total number of units or sets being proposed or to be procured under contract for each reporting element.

C4.3.1.17. Summary Entries

Below the last reporting element listed in Column B, make each of the following summary entries on a separate line:

- *Subcontractor G&A:* Enter in Columns F and J the cumulative G&A costs to date and estimated cost at completion for each of the subcontractors who reported data to you. Then submit the subcontractor's report to the government along with your own report. For subcontractors reporting directly to the government, no entry is required since such costs are included in the data reported under each reporting element. These values will cover all work performed by the subcontractor and not relate to any specific reporting element.
- *Other Subcontractor Miscellaneous Items:* In cases where the cost estimates at completion include dollars set aside for undistributed budget and management reserve, enter the appropriate amounts in Column J for each appropriate element. Also, some contracts may include the imputed costs for facilities cost of money, which should be shown separately and recorded in Columns F and J as appropriate.
- *Subcontractor Profit or Fee:* Enter in Column J the profit or fee at completion for each of the subcontractors from whom you received data. Then submit the subcontractor's report to the government with your own. For subcontractors reporting directly to the government, no entry is required since such costs are

included in the summary entries of the subcontractor's report to DoD. These values will cover all work performed by the subcontractor and not relate to any specific reporting element.

- *Total Cost (less reporting contractor's G&A and Profit or Fee):* Enter the total cost less G&A costs and profit or fee in Column J.
- *Reporting Contractor's G&A:* Enter G&A costs incurred to date and at completion in Columns F and J.
- *Other Reporting Contractor Miscellaneous Items:* In those cases where the cost estimates at completion include dollars set aside for undistributed budget and management reserve, enter the appropriate amounts in Column J for each appropriate element. Also, some contracts may include the imputed costs for facilities cost of money, which should be shown separately and recorded in Columns F and J as appropriate.
- *Reporting Contractor's Profit or Fee:* Enter in Column J profit or fee in accordance with the terms of the contract (e.g., incentive formula).
- *Total:* In Column J, enter the sum of the following line entries.
  - Total Cost (less Reporting Contractor's G&A and Profit or Fee),
  - Reporting Contractor's G&A,
  - Other Reporting Contractor Miscellaneous Items, and
  - Reporting Contractor's Profit or Fee.
- *Page_____ of _____:* At the bottom of each page, enter the page number and total number of pages of the Cost Data Summary Report being submitted.

C4.3.1.18. Item 12. Remarks

Note any relevant information that could be used in the interpretation of the data provided via this report. In addition, report the total contract software costs incurred to date and at completion in the "Remarks" section. The recurring/nonrecurring split is not required. See Subsection C5.2.7, Software Costs, for the definition of software.

C4.3.1.19. Item 13. Name of Person to be Contacted

Provide at least one point of contact (POC) who can respond to questions about the submitted data.

C4.3.1.20. Item 14. Telephone Number

Enter the telephone number for each POC identified in Item 13.

C4.3.1.21. Item 15. Signature

The designated company official authorized to release the report should sign the document. If different from the entry in item 13, type or print the name in the signature block or the "Remarks" section.

C4.3.1.22. Item 16. Date

Enter the date the report is signed and transmitted.

C4.3.2. Functional Cost-Hour Report (DD Form 1921-1)

This report (Figure 13) displays actual costs by functional category (i.e., Engineering, Tooling, Quality Control, Manufacturing, and Other); each functional area is broken out by direct labor hours and cost category (e.g., Direct Labor, Material, Overhead). General and administrative (G&A) expenses and profits or fees are reported separately at the bottom of the report. For ACAT II and III programs, a special section is available for providing summary-level plant-wide data in lieu of the Plant-Wide Data Report (1921-3). However, the Components may elect to use the 1921-3 report for ACAT II and III program contracts. Separate reports may be required for recurring, nonrecurring and total costs, as determined and specified by the DoD contracting component.

Reports will be prepared for the total contract and for selected WBS elements as identified by the program manager and the Cost Integrated Product Team (CIPT) process. The selected reporting elements should be based on high cost, high risk, or high technological interest.

For ACAT I program contracts, only sections A and B should be completed. For ACAT II and III program contracts, sections C and D may also be completed. Reports may be submitted as a program or contract estimate in response to the RFP and subsequently as specified in the contract. Functional Cost-Hour Reports for ACAT I contracts should be submitted with the same frequency as Cost Data Summary Reports.

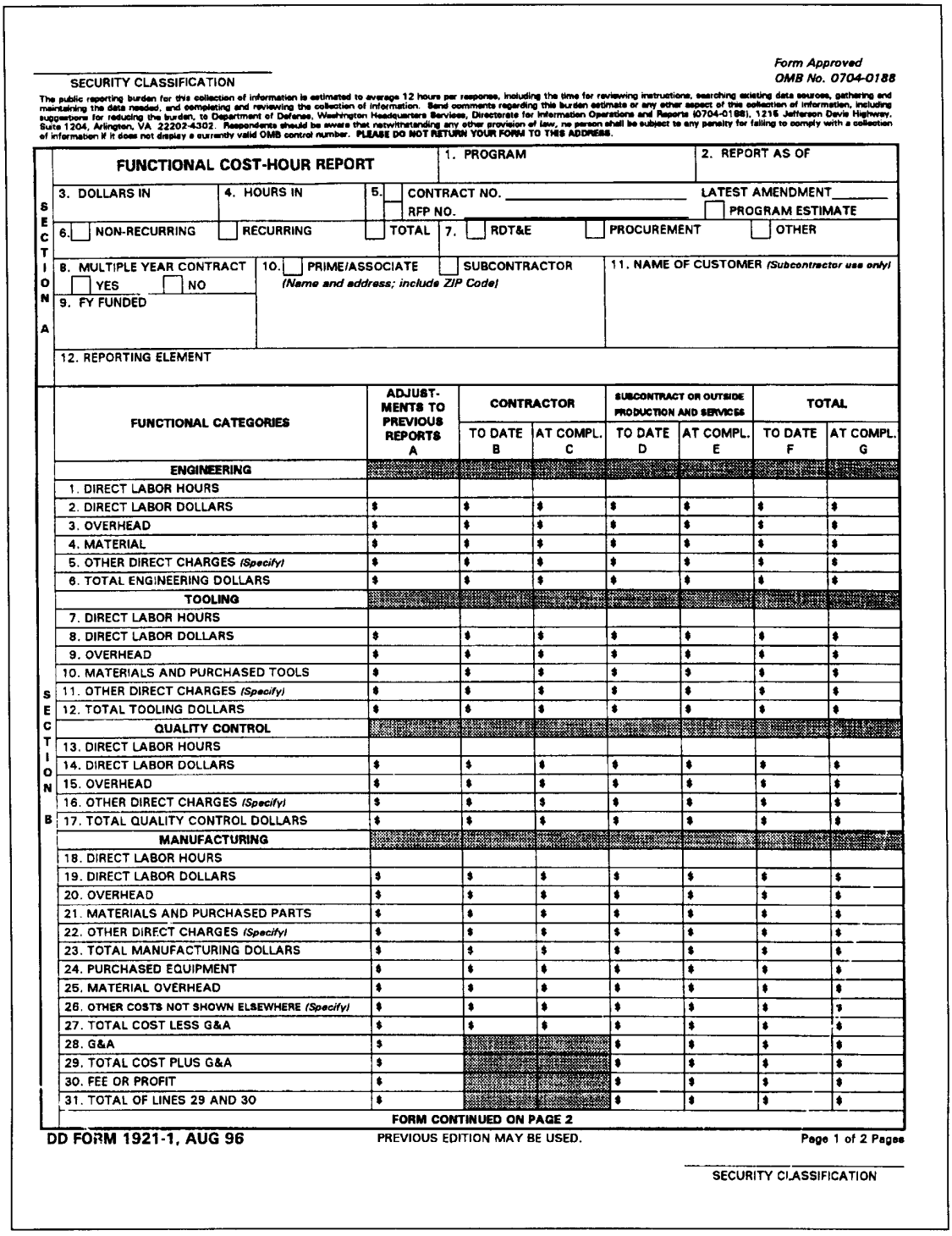
Follow the general instructions in the second paragraph of Subsection C4.3.1 for submitting contractor program estimates. The Functional Cost-Hour Report for contractor program estimates should be the sum of both “on contract” and “not on contract” as explained above unless otherwise specified by the DoD contracting component.

The following instructions apply for completing DD Form 1921-1, the Functional Cost-Hour Report. For contractor program estimates, leave Item 8 and Column A blank unless otherwise specified by the DoD component.

C4.3.2.1. Section A

C4.3.2.1.1. Item 1. Program

Enter the approved system designator or the type, model, and series of the prime end item(s) being purchased under contract or being proposed for contract. If the contract or proposal includes services (research, flight tests, etc.), provide details of the work to be performed. For associate contractors and/or subcontractors required to report separately, enter the end item being purchased on the contract and the program for which it is being procured (e.g., afterbody section of the F-X, wind tunnel tests for the B-X, launch equipment for missile X).



SECURITY CLASSIFICATION

Form Approved
OMB No. 0704-0188

The public reporting burden for this collection of information is estimated to average 12 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. **PLEASE DO NOT RETURN YOUR FORM TO THIS ADDRESS.**

SECTION A

FUNCTIONAL COST-HOUR REPORT			1. PROGRAM	2. REPORT AS OF
3. DOLLARS IN	4. HOURS IN	5. ☐ CONTRACT NO. ☐ RFP NO.	LATEST AMENDMENT ☐ PROGRAM ESTIMATE	
6. ☐ NON-RECURRING	☐ RECURRING	☐ TOTAL	7. ☐ RDT&E ☐ PROCUREMENT	☐ OTHER
8. MULTIPLE YEAR CONTRACT ☐ YES ☐ NO	10. ☐ PRIME/ASSOCIATE ☐ SUBCONTRACTOR *(Name and address; include ZIP Code)*		11. NAME OF CUSTOMER *(Subcontractor use only)*	
9. FY FUNDED				
12. REPORTING ELEMENT				

SECTION B

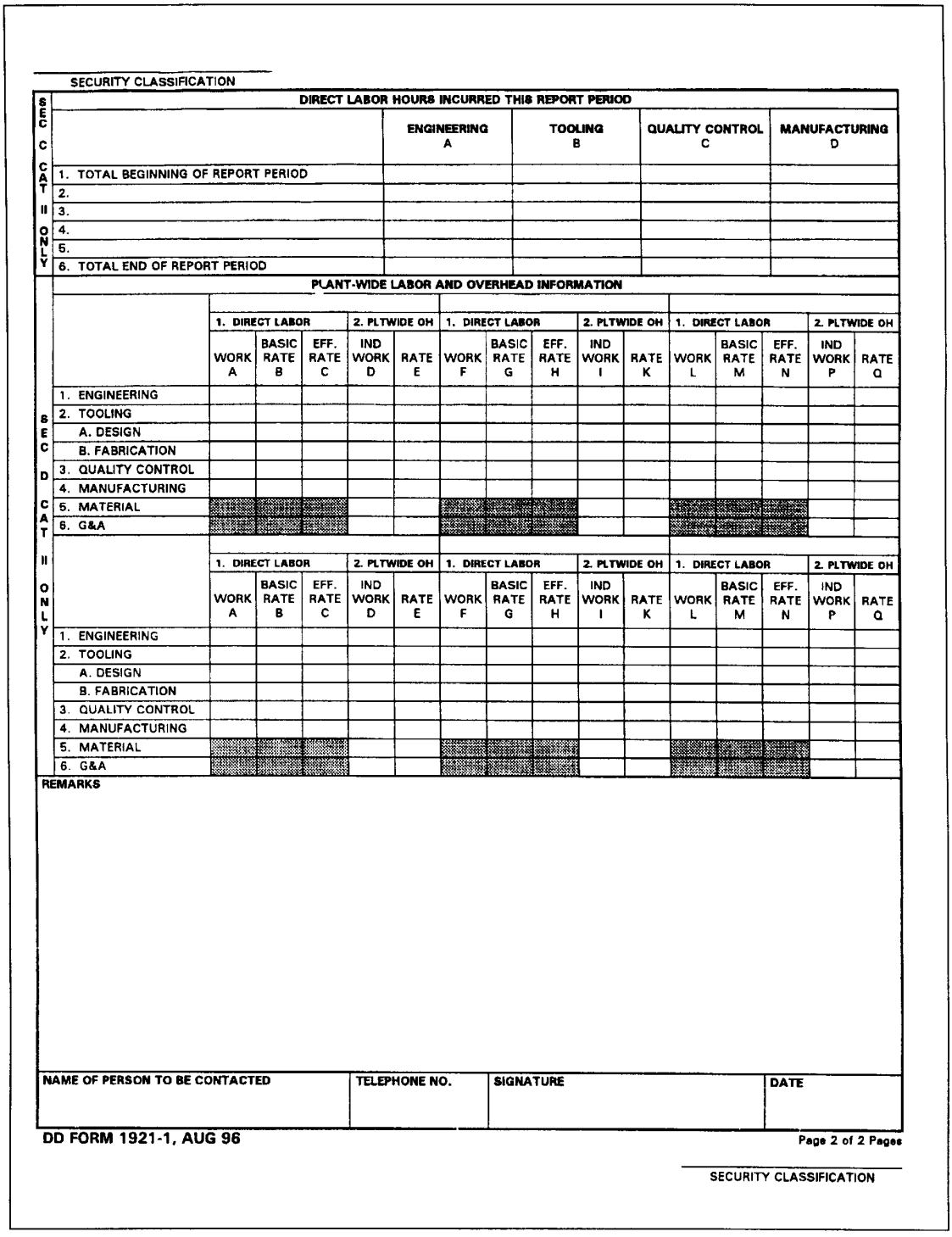
FUNCTIONAL CATEGORIES	ADJUSTMENTS TO PREVIOUS REPORTS A	CONTRACTOR TO DATE B	CONTRACTOR AT COMPL. C	SUBCONTRACT OR OUTSIDE PRODUCTION AND SERVICES TO DATE D	SUBCONTRACT OR OUTSIDE PRODUCTION AND SERVICES AT COMPL. E	TOTAL TO DATE F	TOTAL AT COMPL. G
ENGINEERING							
1. DIRECT LABOR HOURS							
2. DIRECT LABOR DOLLARS	$	$	$	$	$	$	$
3. OVERHEAD	$	$	$	$	$	$	$
4. MATERIAL	$	$	$	$	$	$	$
5. OTHER DIRECT CHARGES *(Specify)*	$	$	$	$	$	$	$
6. TOTAL ENGINEERING DOLLARS	$	$	$	$	$	$	$
TOOLING							
7. DIRECT LABOR HOURS							
8. DIRECT LABOR DOLLARS	$	$	$	$	$	$	$
9. OVERHEAD	$	$	$	$	$	$	$
10. MATERIALS AND PURCHASED TOOLS	$	$	$	$	$	$	$
11. OTHER DIRECT CHARGES *(Specify)*	$	$	$	$	$	$	$
12. TOTAL TOOLING DOLLARS	$	$	$	$	$	$	$
QUALITY CONTROL							
13. DIRECT LABOR HOURS							
14. DIRECT LABOR DOLLARS	$	$	$	$	$	$	$
15. OVERHEAD	$	$	$	$	$	$	$
16. OTHER DIRECT CHARGES *(Specify)*	$	$	$	$	$	$	$
17. TOTAL QUALITY CONTROL DOLLARS	$	$	$	$	$	$	$
MANUFACTURING							
18. DIRECT LABOR HOURS							
19. DIRECT LABOR DOLLARS	$	$	$	$	$	$	$
20. OVERHEAD	$	$	$	$	$	$	$
21. MATERIALS AND PURCHASED PARTS	$	$	$	$	$	$	$
22. OTHER DIRECT CHARGES *(Specify)*	$	$	$	$	$	$	$
23. TOTAL MANUFACTURING DOLLARS	$	$	$	$	$	$	$
24. PURCHASED EQUIPMENT	$	$	$	$	$	$	$
25. MATERIAL OVERHEAD	$	$	$	$	$	$	$
26. OTHER COSTS NOT SHOWN ELSEWHERE *(Specify)*	$	$	$	$	$	$	$
27. TOTAL COST LESS G&A	$	$	$	$	$	$	$
28. G&A	$			$	$	$	$
29. TOTAL COST PLUS G&A	$			$	$	$	$
30. FEE OR PROFIT	$			$	$	$	$
31. TOTAL OF LINES 29 AND 30	$			$	$	$	$

FORM CONTINUED ON PAGE 2

DD FORM 1921-1, AUG 96 PREVIOUS EDITION MAY BE USED. Page 1 of 2 Pages

SECURITY CLASSIFICATION

Figure 13. Functional Cost-Hour Report (DD Form 1921-1)—Page 1



SECURITY CLASSIFICATION

SEC CAT II ONLY

DIRECT LABOR HOURS INCURRED THIS REPORT PERIOD	ENGINEERING A	TOOLING B	QUALITY CONTROL C	MANUFACTURING D
1. TOTAL BEGINNING OF REPORT PERIOD				
2.				
3.				
4.				
5.				
6. TOTAL END OF REPORT PERIOD				

PLANT-WIDE LABOR AND OVERHEAD INFORMATION

SEC CAT II ONLY

	1. DIRECT LABOR			2. PLTWIDE OH		1. DIRECT LABOR			2. PLTWIDE OH		1. DIRECT LABOR			2. PLTWIDE OH	
	WORK A	BASIC RATE B	EFF. RATE C	IND WORK D	RATE E	WORK F	BASIC RATE G	EFF. RATE H	IND WORK I	RATE K	WORK L	BASIC RATE M	EFF. RATE N	IND WORK P	RATE Q
1. ENGINEERING															
2. TOOLING															
A. DESIGN															
B. FABRICATION															
3. QUALITY CONTROL															
4. MANUFACTURING															
5. MATERIAL															
6. G&A															

SEC CAT II ONLY

	1. DIRECT LABOR			2. PLTWIDE OH		1. DIRECT LABOR			2. PLTWIDE OH		1. DIRECT LABOR			2. PLTWIDE OH	
	WORK A	BASIC RATE B	EFF. RATE C	IND WORK D	RATE E	WORK F	BASIC RATE G	EFF. RATE H	IND WORK I	RATE K	WORK L	BASIC RATE M	EFF. RATE N	IND WORK P	RATE Q
1. ENGINEERING															
2. TOOLING															
A. DESIGN															
B. FABRICATION															
3. QUALITY CONTROL															
4. MANUFACTURING															
5. MATERIAL															
6. G&A															

REMARKS

NAME OF PERSON TO BE CONTACTED	TELEPHONE NO.	SIGNATURE	DATE

DD FORM 1921-1, AUG 96

Page 2 of 2 Pages

SECURITY CLASSIFICATION

Figure 13. Functional Cost-Hour Report (DD Form 1921-1)—Page 2

C4.3.2.1.2. Item 2. Report As Of

Enter the last day, month, and year of the reporting period.

C4.3.2.1.3. Item 3. Dollars In

Report all cost data in thousands of dollars rounded to the nearest tenth, unless otherwise specified in the RFP or contract. Where contractor data-gathering systems do not supply the data rounded as specified, complete the reporting requirements in the manner in which the data are generated and make a note in the "Remarks" section.

C4.3.2.1.4. Item 4. Hours In

Report all labor-hour data in thousands rounded to the nearest tenth, unless otherwise specified in the RFP or contract. Where contractor data-gathering systems do not supply the data rounded as specified, complete the reporting requirements in the manner in which the data are generate and make a note in the "Remarks" section.

C4.3.2.1.5. Item 5. Contract No. or RFP No.

If the report is for a contract estimate, check the appropriate box and enter the assigned contract number and the number of the latest amendment (if applicable). If the report is in response to an RFP, enter the assigned RFP number. Check the Program Estimate box if the report is to provide this data. (If the report is for a program estimate, refer to Subsection C4.3.1 above.)

C4.3.2.1.6. Item 6. Nonrecurring/Recurring/Total

Check the appropriate box(es) to indicate whether the data to be reported is nonrecurring, recurring, or for total effort. For ACAT I programs, use the following guidelines, which apply individually to each element selected for reporting whether it be for the total contract or a specific WBS element. If either nonrecurring cost or recurring cost is projected to be more than 5 percent but less than 95 percent of the estimated incurred costs at completion, a separate 1921-1 report is required for each of the two categories, and the appropriate box should be selected. A third report for Total Costs for that reporting element is not required. However, if either recurring cost or nonrecurring cost represents 95 percent or more of the costs for each element selected for reporting, mark the appropriate recurring or nonrecurring box and note in the "Remarks" section that the costs represent total costs (100 percent of the combined recurring and nonrecurring costs).

Table 4 shows three examples of reporting requirements for prime contractors. Please note the application of the rule may result in different recurring/nonrecurring splits for the total contract and individual elements selected for reporting. For example, if the total contract is 96% recurring, all costs for total contract reporting would be shown as recurring. However, if an individual WBS element selected for reporting on that same contract is 80% recurring and 20% nonrecurring, two reports would be required to reflect the split.

Table 4. Examples of Prime Contractor Reporting Requirements for Form 1921-1

If the split is:	The prime submits:	And marks:
95% Recurring 5% Nonrecurring	One report—show total costs	"Recurring" in Item 6 and notes in "Remarks" that data reflect total costs
50% Recurring 50% Nonrecurring	Two reports—show split in recurring/nonrecurring costs	"Recurring" or ""Nonrecurring" in Item 6 s appropriate
5% Recurring 95% Nonrecurring	One report—show total costs	"Nonrecurring" in Item 6 and notes in "Remarks" that data reflect total costs

Nonrecurring costs are defined as "those elements of development and investment cost which generally occur only once in the life cycle of a weapon/support system." Recurring costs are "repetitive elements of development and investment costs that vary or occur with the quantity being produced." Total cost (cost incurred) is defined as the sum of nonrecurring and recurring cost incurred. For a more comprehensive definition of these terms, refer to Chapter 5.

C4.3.2.1.7. Item 7. RDT&E/Procurement/Other

Check the appropriate box to classify the data to be reported as RDT&E, Procurement, or Other funds. If you select "Other," specify the type funding in the "Remarks" section.

C4.3.2.1.8. Item 8. Multiple Year Contract

If the contract is funded from a single fiscal year, check the "NO" box and enter the specific fiscal year funding for the contract in question. However, if the report pertains to an incrementally funded research and development contract, check the "YES" box and enter all the fiscal years covered by the contract in the "Remarks" section.

In some cases, contractors may be operating under a multi-year contract that provides for annual increments of the quantities procured under the contract. This type of contract is an example of multi-year procurement (MYP) and can be identified by the following characteristics:

- The government negotiates the contract for the quantities to be procured in more than one year.
- Contract quantities are budgeted and financed in accordance with the program year for which each quantity is authorized.
- Funds are obligated only for the first year's quantity, with succeeding year's contract quantities funded annually thereafter. In the event funds are not made available to support one or more succeeding year's quantities, the contract will be cancelled. However, contractors are protected from loss by the terms of the contract cancellation ceiling clause.

For MYP contracts described above, check the "YES" box and enter the fiscal year of funding covered by the report.

You may be required to submit a separate report by type of funds and fiscal year on designated reporting elements.

C4.3.2.1.9. Item 9. FY Funded

Enter the fiscal year for which data is being reported. If the contract data being reported contains more than one FY, show the most current in item 9 and the remaining years in the "Remarks" section. If the data being reported are program estimates, select from the options of years to be covered below:

- prior fiscal years,
- fiscal year – 2,
- fiscal year – 1,
- current fiscal year,
- fiscal year + 1,
- fiscal year + 2,
- fiscal year + 3,
- fiscal year + 4,
- fiscal year + 5,
- fiscal year + 6,
- balance to complete, and
- total program.

Prior fiscal year, balance to complete and total program values should always be included in contractor program estimates.

C4.3.2.1.10. Item 10. Prime/Associate or Subcontractor

Check the Prime/Associate box if you are the prime or associate contractor for the work. If you are a subcontractor, check the Subcontractor box. Enter the name, division (if applicable), and the address of the reporting prime, associate, or subcontractor in the space provided.

C4.3.2.1.11. Item 11. Name of Customer (Subcontractor use only)

If a subcontractor is submitting the report, enter the name of the customer for whom the work on contract is being performed. If a prime or associate contractor is submitting the report, leave the space blank.

C4.3.2.1.12. Item 12. Reporting Element

Enter the WBS reporting element specified in the contract or by the DoD component for which cost data is to be reported. These reporting elements should match those listed in the approved CCDR Plan. The PM, in coordination with the CIPT, should

incorporate all proposed reporting element changes in a revised CCDR Plan for review and approval by the CAIG before changing the contract or other reporting direction. Nevertheless, if there have been changes to the list of reporting elements that are not reflected in the contract or approved CCDR Plan, note these discrepancies in the "Remarks" section. Also, where appropriate, enter the total quantity of units or sets being procured for this contract and reporting element in the "Remarks" section. Quantities should be consistent with those reported in Column G of DD Form 1921.

C4.3.2.2. Section B

See special instructions below and in Appendix 2 for reporting element Airframe.

C4.3.2.2.1. Lines 1—23. Functional Categories: Engineering, Tooling, Quality Control, and Manufacturing

Complete these line items using data extracted from accounting records for the designated cost elements and functional categories (Engineering, Tooling, Quality Control, and Manufacturing) as defined in Chapter 5.

If your accounting system aggregates incurred costs in a manner that does not coincide with those definitions, estimate the costs required for CCDR reporting and describe the estimation method in the "Remarks" section. For example, if overtime and shift premiums for direct labor are charged to overhead, these costs should be shown in the "Remarks" section of this report by functional category. Fringe benefits charged direct rather than to an overhead account should be reported separately and shown in the "Remarks" section.

C4.3.2.2.2. Line 24. Purchased Equipment

Enter the cost of all purchased equipment.

C4.3.2.2.3. Line 25. Material Overhead

Enter the overhead cost attributable to procured or subcontracted products to include the cost of purchasing, expediting, and storing materials, parts, equipment and assemblies.

C4.3.2.2.4. Line 26. Other Costs Not Shown Elsewhere (Specify)

This category includes all direct costs for the reporting elements not assigned to the categories of Engineering, Tooling, Quality Control, and Manufacturing. Also includes undistributed budget, management reserve, and facilities cost of money as appropriate. Show details for all of the above costs in the "Remarks" section.

C4.3.2.2.5. Line 27. Total Cost Less G&A

Enter the total costs less G&A expenses for all columns.

C4.3.2.2.6. Line 28. G&A

Use one of the following options to enter data for this reporting element:

- Enter G&A costs associated with ACAT II and III contracts when the report is for the total contract.
- Enter subcontractor's G&A in Columns D, E, F, and G for ACAT I, II, and III contracts reporting Airframe elements.

C4.3.2.2.7. Line 29. Total Cost Plus G&A

Calculate and enter the sum of lines 27 and 28.

C4.3.2.2.8. Line 30. Fee or Profit

Use one of the following options to enter data for this reporting element:

- Enter fee or profit associated with ACAT II and III contracts when the report is for the total contract. Include the costs of any facilities that apply to the contract.
- Enter subcontractor's fee in Columns D, E, F, and G for ACAT I, II, and III contracts reporting Airframe elements.

C4.3.2.2.9. Line 31. Total of Lines 29 and 30

Calculate and enter the sum of lines 29 and 30.

C4.3.2.2.10. Column A. Adjustments to Previous Reports

Enter corrections necessary to the previous reporting period totals (shown in Columns B and D) and give an explanation in the "Remarks" section.

C4.3.2.2.11. Columns B. and C. Contractor To Date and Contractor At Completion

Enter your costs to date and estimated cost at completion. See detailed data-entry instruction for Lines 28 through 32. For the ACAT I, II, and III contracts with the reporting element Airframe, see detailed instructions given in Appendix 2.

C4.3.2.2.12. Columns D and E. Subcontractor and Outside Production and Services To Date and At Completion

Table 5 illustrates reporting requirements of subcontractor data. In addition to their own data, prime contractors must provide costs of subcontractors from whom they receive data. For subcontractors who instead report directly to DoD, primes need only show total costs, doing so in the "Remarks" section. For subcontractors (other than airframe subcontractors) with no reporting requirements, primes must provide an estimated distribution of total costs across the four functional categories as shown in the table. Include in line 23 manufacturing subcontracts involving engineering and tooling

expenses. The total of the individual categories to date and at completion should agree with the estimated price accumulated to date and the total contract price at completion. For nonreporting subcontractors of airframe contracts, each line item should be estimated.

Table 5. Reporting Requirements for Subcontractor Data on Form 1921-1

Line #	Functional Categories Data	Prime Contractor Data	Subcontractor Data			
			Subcontractors Reporting to Prime Contractor	Subcontractors Reporting to DoD	Nonreporting Subcontractors	Nonreporting Subcontractors (Airframe)
1-5	Engineering line items	◆	◆	☐		❖
6	—Engineering totals	◆	◆	☐	❖	❖
7–11	Tooling line items	◆	◆	☐		❖
12	—Tooling totals	◆	◆	☐	❖	❖
13–16	Quality control line items	◆	◆	☐		❖
17	—Quality control totals	◆	◆	☐	❖	❖
18–22	Manufacturing line items	◆	◆	☐		❖
23	—Manufacturing totals	◆	◆	☐	❖	❖
24–26	Miscellaneous items	◆	◆	☐		❖
27	—Total cost, less G&A	◆	◆	☐		❖
28 & 30	G&A and fee/profit		◆			❖
31	—Price		◆	◆*	◆	◆

◆ Actual data included in report.
◆*Actual data included in "Remarks" section of report.
❖ Estimated data included in report.
☐ Data available to DoD analysts only.

The following additional guidelines apply for reporting element Airframe within ACAT I, II, and III contracts. Outside production and services is a special category of costs on subcontracts for Airframe. Prime contractors should fill out these columns for subcontractors not reporting separately. All subcontracts for Airframe are distributed functionally in outside production and services either among all categories or as purchased equipment. Additional rules are as follows.

- All subcontractors for items or services normally produced or performed in airframe plants are to be distributed as appropriate among all functional categories of cost.
- All subcontracts for items defined as purchased equipment for reporting element Airframe in Appendix 2 should be included as purchased equipment.
- Final entries will be the subcontractors G&A and profit or fee.

C4.3.2.2.13. Columns F and G. Total To Date and At Completion

Enter the sum of Columns B and D and Columns C and E for each line. Note that for ACAT I, II, and III contracts, the total G&A and profit or fee entries will be those of only the subcontractors in Columns D and E.

C4.3.2.3. Section C

This section applies to ACAT II and III contracts only.

First, enter the accumulated direct labor hours by functional category at the beginning of the report period. Use Lines 2 through 5 to input the hours for the subsequent periods as designated in the contract. Provide totals for the end of the reporting period by functional category in Line 6.

C4.3.2.4. Section D

This section applies to ACAT II and III contracts only.

Use the time periods reported in Section C when completing Section D.

If you are submitting two or more Functional Cost-Hour Reports on a single contract, provide plant-wide labor and overhead information only once. Duplication of these data on each form is not necessary.

If any data provided in this section are related to data in Section B (other costs not shown elsewhere), show how the data were mapped to the functional categories in Section D in the "Remarks" section.

Explain any allocation, proration, or adjustment of overhead premium or fringe benefits in the "Remarks" section.

C4.3.2.4.1. Direct Labor

C4.3.2.4.1.1. Columns A, F, and L. Work

Enter the average number of direct workers (headcount) included in the plant-wide labor rates for Engineering, Tooling, Quality Control, and Manufacturing. Specify the method used to establish headcount in the "Remarks" section.

For design and fabrication, report data for tooling separately only when these costs are segregated in the contractor's accounting system.

C4.3.2.4.1.2. Columns B, G, and M. Basic Rate

Calculate the basic rate by using the following formula:

$$\frac{\text{Total direct labor dollars – overtime premium and fringe benefits}}{\text{total direct-labor labor-hours}}$$

C4.3.2.4.1.3. Columns C, H, and N. Effective Rate

Use the formula used for Columns B, G and M above, but include the overtime premium in the total direct-labor dollar values. For this calculation, take direct overtime premiums included in overhead out and add it to total direct-labor dollars.

C4.3.2.4.2. Plant-Wide Overhead

C4.3.2.4.2.1. Columns D, I, and P. Indirect Workers

Indirect workers are all other workers not included in the direct worker category.

C4.3.2.4.2.2. Columns E, K, and G. Rate

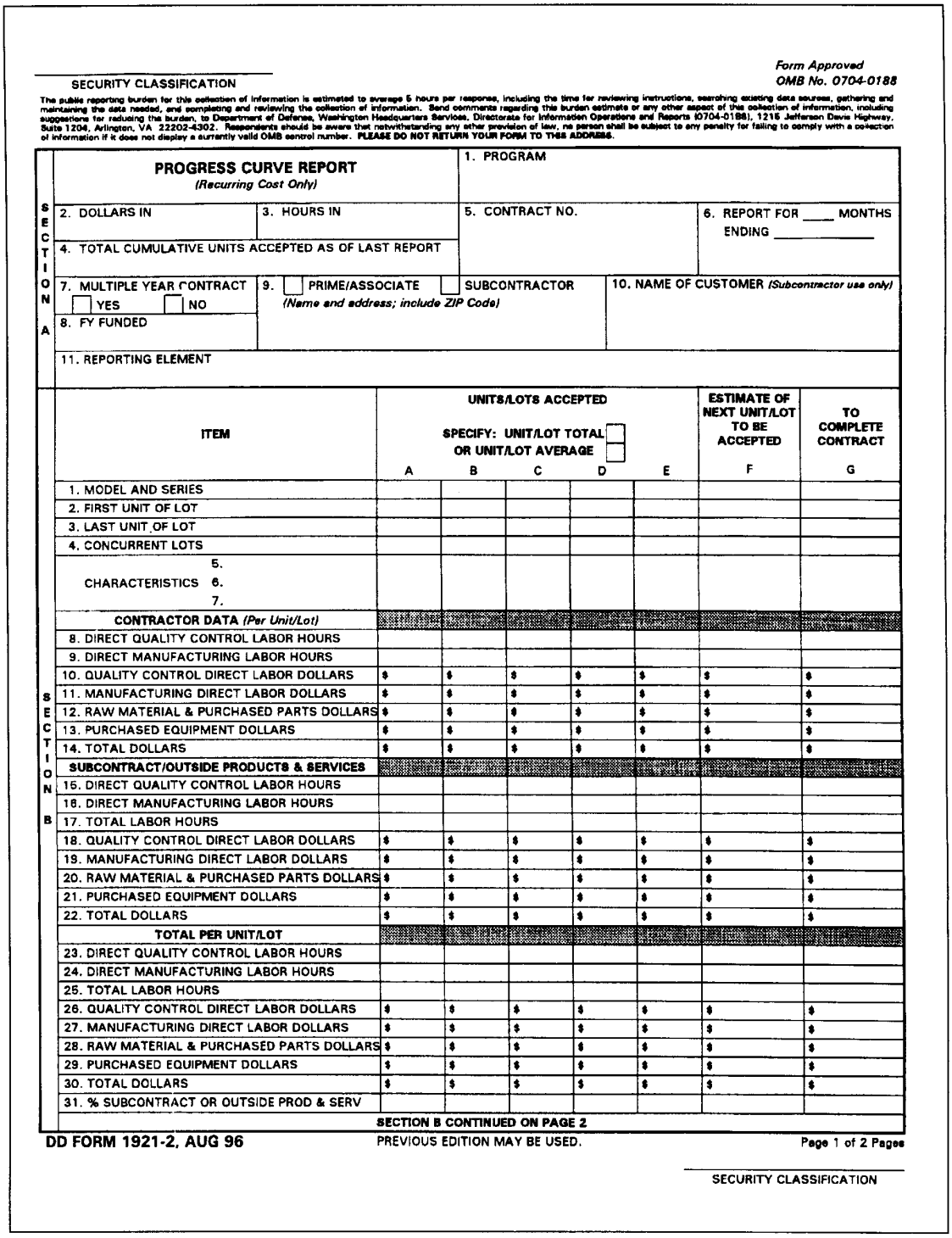
Enter the overhead rates used during the reporting period and provide any relevant details in the "Remarks" section. If two or more overhead rates were combined and applied during the reporting period, identify these rates in the "Remarks" section. Report data for the total of the tooling functional category. There no longer is any requirement to subdivide tooling into design and fabrication components.

C4.3.3. Progress Curve Report (DD Form 1921-2)

The Progress Curve Report (Figure 14) shows only actual and estimated to complete recurring costs by unit or lot for selected reporting elements. For cost estimating purposes, the CIPT is responsible for defining units and lots for its particular programs and contracts. Unit reporting refers to individual reporting by unit number (e.g., tail number for aircraft). Such reporting is generally prescribed when specific characteristics, measurements, or other specific data are required of individual units (e.g., weight of an aircraft). Lot reporting is a contractual grouping that consists of two or more units (e.g. unit number through unit number). A lot typically represents the quantity purchased in a single fiscal year (FY). However, a given FY buy can also be subdivided into two or more lots if contractually preferable. Similarly, a lot is usually related to one contract but, at times, can be associated with two or more contracts. Block reporting refers to a grouping of similarly configured items. A block of units can apply to all the units in a single lot or can be one of several blocks within a given lot. One block may also apply to two or more lots.

The report also shows direct-labor hours for Quality Control and Manufacturing. Costs and hours are reported for the contractor, the subcontractor, and total. Within these categories, costs are further subdivided by major Manufacturing cost category to include Quality Control, Manufacturing, Raw Materials and Purchased Parts, and Purchased Equipment. These report data are primarily used to develop progress or learning curves. Section C of the form is for providing performance data and a schedule of release dates for ACAT II and III programs.

For R&D contracts, report data by unit (not by lot; see Subparagraph C4.3.3.2.4, Item Information, for unit and lot descriptions), unless otherwise specified in the contract. Progress Curve Reports are not required on contracts that do not provide for deliverable end items or hardware. For all ACAT I, II, and III contracts, submit the Progress Curve Report as specified in the CCDR Plan and contract.



SECURITY CLASSIFICATION

Form Approved
OMB No. 0704-0188

The public reporting burden for this collection of information is estimated to average 5 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. **PLEASE DO NOT RETURN YOUR FORM TO THIS ADDRESS.**

SECTION A

PROGRESS CURVE REPORT *(Recurring Cost Only)*		1. PROGRAM	
2. DOLLARS IN	3. HOURS IN	5. CONTRACT NO.	6. REPORT FOR ____ MONTHS ENDING _____
4. TOTAL CUMULATIVE UNITS ACCEPTED AS OF LAST REPORT			
7. MULTIPLE YEAR CONTRACT ☐ YES ☐ NO	9. ☐ PRIME/ASSOCIATE ☐ SUBCONTRACTOR *(Name and address; include ZIP Code)*		10. NAME OF CUSTOMER *(Subcontractor use only)*
8. FY FUNDED			
11. REPORTING ELEMENT			

SECTION B

ITEM	UNITS/LOTS ACCEPTED — SPECIFY: UNIT/LOT TOTAL ☐ OR UNIT/LOT AVERAGE ☐ A	B	C	D	E	ESTIMATE OF NEXT UNIT/LOT TO BE ACCEPTED F	TO COMPLETE CONTRACT G
1. MODEL AND SERIES							
2. FIRST UNIT OF LOT							
3. LAST UNIT OF LOT							
4. CONCURRENT LOTS							
CHARACTERISTICS 5. 6. 7.							
CONTRACTOR DATA *(Per Unit/Lot)*							
8. DIRECT QUALITY CONTROL LABOR HOURS							
9. DIRECT MANUFACTURING LABOR HOURS							
10. QUALITY CONTROL DIRECT LABOR DOLLARS	$	$	$	$	$	$	$
11. MANUFACTURING DIRECT LABOR DOLLARS	$	$	$	$	$	$	$
12. RAW MATERIAL & PURCHASED PARTS DOLLARS	$	$	$	$	$	$	$
13. PURCHASED EQUIPMENT DOLLARS	$	$	$	$	$	$	$
14. TOTAL DOLLARS	$	$	$	$	$	$	$
SUBCONTRACT/OUTSIDE PRODUCTS & SERVICES							
15. DIRECT QUALITY CONTROL LABOR HOURS							
16. DIRECT MANUFACTURING LABOR HOURS							
17. TOTAL LABOR HOURS							
18. QUALITY CONTROL DIRECT LABOR DOLLARS	$	$	$	$	$	$	$
19. MANUFACTURING DIRECT LABOR DOLLARS	$	$	$	$	$	$	$
20. RAW MATERIAL & PURCHASED PARTS DOLLARS	$	$	$	$	$	$	$
21. PURCHASED EQUIPMENT DOLLARS	$	$	$	$	$	$	$
22. TOTAL DOLLARS	$	$	$	$	$	$	$
TOTAL PER UNIT/LOT							
23. DIRECT QUALITY CONTROL LABOR HOURS							
24. DIRECT MANUFACTURING LABOR HOURS							
25. TOTAL LABOR HOURS							
26. QUALITY CONTROL DIRECT LABOR DOLLARS	$	$	$	$	$	$	$
27. MANUFACTURING DIRECT LABOR DOLLARS	$	$	$	$	$	$	$
28. RAW MATERIAL & PURCHASED PARTS DOLLARS	$	$	$	$	$	$	$
29. PURCHASED EQUIPMENT DOLLARS	$	$	$	$	$	$	$
30. TOTAL DOLLARS	$	$	$	$	$	$	$
31. % SUBCONTRACT OR OUTSIDE PROD & SERV							

SECTION B CONTINUED ON PAGE 2

DD FORM 1921-2, AUG 96 PREVIOUS EDITION MAY BE USED. Page 1 of 2 Pages

SECURITY CLASSIFICATION

Figure 14. Progress Curve Report (DD Form 1921-2)—Page 1

SECURITY CLASSIFICATION

		ITEM	UNITS/LOTS ACCEPTED A	B	C	D	E	ESTIMATE OF NEXT UNIT/LOT TO BE ACCEPTED F	TO COMPLETE CONTRACT G
SECTION B	MOS OR QTRS	MFG FLOW TIME							
		32. START							
		33. FINISH							
		34.							
		35.							
		36.							
		37.							
		38.							
		39.							
SECTION C		PERFORMANCE DATA *(Per Unit/Lot)*							
		40. STANDARD HOURS							
		41. VARIANCE							

CAT II	SCHEDULE OF RELEASE DATES	ENGINEERING A	MATERIAL B	TOOLING C	MANUFACTURING D
	1. PLANNED				
	2. ACTUAL				

REMARKS

NAME OF PERSON TO BE CONTACTED	TELEPHONE NO.	SIGNATURE	DATE

DD FORM 1921-2, AUG 96

Page 2 of 2 Pages

SECURITY CLASSIFICATION

Figure 14. Progress Curve Report (DD Form 1921-2)—Page 2

C4.3.3.1. Section A

C4.3.3.1.1. Item 1. Program

Enter the approved system designator or the type, model, and series of the prime end item(s) being purchased or proposed. If the contract or proposal includes services (research, flight tests, etc.), provide details of the work to be performed. For associate contractors or subcontractors required to report separately, enter the end item being purchased on the contract and the program for which it is being procured (e.g., afterbody section of the F-X, wind tunnel tests for the B-X, launch equipment for missile X).

C4.3.3.1.2. Item 2. Dollars In

Report all cost data in thousands of dollars rounded to the nearest tenth, unless otherwise specified in the RFP or contract. If the contractor's data-gathering systems do not supply costs rounded to the nearest tenth, enter costs the way they are generated and make a note in the "Remarks" section.

C4.3.3.1.3. Item 3. Hours In

Report all labor-hour data in thousands rounded to the nearest tenth, unless otherwise specified in the RFP or contract. If the contractor's data-gathering systems do not supply the data rounded to the nearest tenth, enter data the way they are generated and make a note in the "Remarks" section.

C4.3.3.1.4. Item 4. Total Cumulative Units Accepted As Of Last Report

Enter the cumulative number of units reported as accepted in the preceding period. Unless otherwise specified, the cumulative value is the total number of units of a given model you have accepted since inception of the program/model, whether purchased under this or another contract.

C4.3.3.1.5. Item 5. Contract Number

Enter the assigned contract number and the number of the last amendment, if applicable. For subcontractor reporting, enter the purchase order or subcontract number.

C4.3.3.1.6. Item 6. Report for ___ Months Ending ___

Enter the number of months covered by the report and the last day, month, and year of the reporting period.

C4.3.3.1.7. Item 7. Multiple Year Contract

If the contract is funded for a single fiscal year, check the "NO" box and enter the specific fiscal year funding the contract. However, if the report pertains to an incrementally funded research and development contract, check the "YES" box and in the "Remarks" section enter all the fiscal years covered by the contract.

In some cases, contractors may be operating under a multi-year contract that provides for annual increments of the quantities procured under the contract. This type of contract is an example of multi-year procurement (MYP) and can be identified by the following characteristics:

- The government negotiates the contract for the quantities to be procured in more than one year.
- Contract quantities are budgeted and financed in accordance with the program year for which each quantity is authorized.
- Funds are obligated only for the first year's quantity, with succeeding year's contract quantities funded annually thereafter. In the event funds are not made available to support one or more succeeding year's quantities, the contract will be cancelled. However, contractors are protected from loss by the terms of the contract cancellation ceiling clause.

For MYP contracts, check the "YES" box and enter the fiscal year of funding covered by the report.

You may be required to submit a separate report by type of funds and fiscal year on designated reporting elements.

C4.3.3.1.8. Item 8. FY Funded

Enter the fiscal year for which data are being reported. If the contract being reported contains more than one FY, show the most current in item 6 and the remaining years in the "Remarks" section.

C4.3.3.1.9. Item 9. Prime/Associate or Subcontractor

Check the Prime/Associate box if you are the prime or associate contractor for the work. If you are a subcontractor, check the Subcontractor box. Enter the name, division (if applicable), and the address of the reporting prime, associate, or subcontractor in the space provided.

C4.3.3.1.10. Item 10. Name of Customer (Subcontractor Use Only)

If a subcontractor is submitting the report, enter the name of the prime contractor for whom the work is being performed. If a prime or associate contractor is submitting the report, leave this item blank.

C4.3.3.1.11. Item 11. Reporting Element

Enter the reporting elements specified in the contract or by the DoD component for which cost data are to be reported. These reporting elements should match those listed in the approved CCDR Plan. The PM, in coordination with the CIPT, should incorporate all proposed reporting element changes in a revised CCDR Plan for review and approval by the CAIG before changing the contract or other reporting direction. Nevertheless, if there have been changes to the list of reporting elements that are not reflected in the contract or approved CCDR Plan, note these discrepancies in the "Remarks" section.

C4.3.3.2. Section B

Enter the appropriate information for each of the 39 categories of data listed under the Item heading. Each column and line entry is described below.

C4.3.3.2.1. Columns A through E. Unit/Lots Accepted

Above columns A through E, check the appropriate box to indicate whether the hour and cost data you enter on this report are unit/lot totals or unit/lot averages.

Report appropriate data for each unit or lot the DoD contracting component accepts—whether designated as test, operational, or spare. Do not report on items such as mock-ups, which represent only partially completed units, and spare parts. If there has been a conditional acceptance, report the lots or units as accepted and indicate the conditions of acceptance in the "Remarks" section. If a particular unit or lot is expected to take an usually long time between shop completion and acceptance, submit a report on the basis of the level of shop completions, and make a note in the "Remarks" section. The method used to measure the level of shop completions should also be noted in the "Remarks" section. After acceptance of the unit or lot, include a revision in the next scheduled Progress Curve Report to reflect actual recurring labor-hours and costs incurred. Equivalent units may be reported as agreed by the contractor and the procuring contracting officer. Explain how equivalent units were calculated in the "Remarks" section.

You may make revisions to previously submitted Progress Curve Reports by using the next scheduled report to be submitted. Previously reported lot or unit data can be revised by using the first column (Column A) of the next report. If you make any revisions to previously submitted data using the report's first column, clearly mark this data as revised and explain the changes in the "Remarks" section.

C4.3.3.2.2. Column F. Estimate of Next Unit/Lot To Be Accepted

Enter the forecasted level of recurring labor-hours and dollars per unit (or lot average) for the next unit (or lot) to be accepted on the contract. If a unit or lot has not been accepted on the contract, report the estimate for the first unit or lot. For R&D contracts, report per unit data unless otherwise specified in the contract. The estimated costs to complete the next unit or lot should be based upon planned or expected costs to be incurred regardless of contract price, ceiling, or funds available.

C4.3.3.2.3. Column G. To Complete Contract

Enter estimates for recurring labor-hours needed and dollars per unit (or lot average) to complete the remaining units on the contract. These estimates should include only authorized production units. The estimated costs to complete the contract should be based upon planned or expected costs to be incurred regardless of contract price, ceiling, or funds available.

C4.3.3.2.4. Item Information

C4.3.3.2.4.1. Line 1. Model and Series

Enter the basic model and series designation of the test or operational unit(s) for each unit or lot in columns A through E. A basic model includes all units whose weight, dimensions, performance characteristics, and manufacturing process are so similar that DoD considers them to be identical. If a lot includes more than one series of a model, note the number and series designation of each in the "Remarks" section.

C4.3.3.2.4.2. Lines 2, 3, and 4. First Unit of Lot, Last Unit of Lot, and Concurrent Units/Lots

If you are reporting on a system, enter in Blocks 2A and 3A, respectively, the cumulative number of units accepted for the first and last units of the first lot accepted during the period. Unless otherwise specified, cumulative units are to be *total* units of a given model the reporting contractor has accepted since the inception of a program/model regardless of the number of contracts under which the model has been procured. Use columns B through E to enter data for additional lots accepted during the period. If, however, you are making corrections to previous reports, use column A to show the corrected data and begin reporting current period data in column B.

Concurrent units or lots are items being produced within a given lot or in another lot in the same FY buy, respectively, that do not apply to the contract being reported. Items for commercial delivery or delivery to other DoD Components or programs (i.e., Military Assistance Program) on separate contracts are included in this category. In Block 4A (concurrent units/lots), enter the number of concurrent units in each lot that applies to that FY buy. In a production situation when the relevant costs cannot be isolated, use the unit average costs for all units in the lot regardless of whether they are delivered under the contract being reported or are concurrent units.

If you are reporting on a unit, enter the cumulative number of each unit accepted during the period in Line 2. Unless otherwise specified, cumulative units are to be *total* units of a given model the reporting contractor has accepted since the inception of a program/model regardless of the number of contracts under which the model has been procured. Use columns B through E to enter data for additional lots accepted during the period. If, however, you are making corrections to previous reports, use column A to show the corrected data and begin reporting current period data in column B.

Where unit or lot accounting systems are not available, equivalent units may be used as the basis for reporting in Line 2. This method may be followed if, in the judgement of the procuring contracting officer, work station standards are of a quality such that standard equivalent units will be reasonably accurate and a consistent measure of acceptable work. If you use this method, lots should include the standard equivalent units of production for time periods no greater than one month. Include explanations in the "Remarks" section.

C4.3.3.2.4.3. Lines 5 though 7. Characteristics

The contracting officer will specify the specific characteristics to be reported (e.g., weight, range, and speed) based upon the approved CCDR Plan. The program manager in coordination with the CIPT is responsible for identifying the characteristics proposed for reporting in the CCDR Plan that is forwarded to the CAIG for approval. Airframe weight is a mandatory requirement for aircraft contracts. Enter the unit or average lot characteristics for units produced under the contract. Distinguish "make weight" between prime contractors and subcontractors, if applicable. If additional space is required, use the "Remarks" section or a separate sheet.

C4.3.3.2.5.Contractor Data (Per Unit/Lot)

C4.3.3.2.5.1. Lines 8 though 13. Direct Labor Hours and Dollars

Enter for each unit (or lot) the contractor's direct-labor hours and dollars per unit (or average per lot) for Quality Control and Manufacturing Labor, Raw Materials and Purchased Parts, and Purchased Equipment. Complete the reporting requirements using data extracted from existing accounting records. If your records do not provide actual figures, give an estimate and indicate the basis for the estimate in the "Remarks" section.

C4.3.3.2.5.2. Line 14. Total Dollars

Enter the sum of lines 10 through 13.

C4.3.3.2.6. Subcontract/Outside Products & Services

C4.3.3.2.6.1. Lines 15 though 21. Direct Labor Hours and Dollars

Table 6 illustrates reporting requirements of subcontractor data for Form 1921-2.

In addition to their own data, prime contractors must provide costs of subcontractors from whom they receive data. For subcontractors who instead report directly to DoD, primes need only show total costs, doing so in the Remarks section. For subcontractors with no reporting requirements, primes must provide an estimated distribution of total costs across each of the line items in the subcontractor section (Lines 15-22). For outside products and services, enter the appropriate labor and cost data for Airframe reporting elements according to the special instructions outlined in Appendix 2.

C4.3.3.2.6.2. Line 22. Total Dollars

Enter the sum of lines 18 through 21.

C4.3.3.2.7. Total Per Unit/Lot

C4.3.3.2.7.1. Line 23. Direct Quality Control Labor Hours

Enter the sum of lines 8 and 15.

Table 6. Reporting Requirements for Subcontractor Data on Form 1921-2

Data Reported by Prime Contractor Line #		Prime Contractor Data	Subcontractor Data		
			Subcontractors Reporting to Prime	Subcontractors Reporting to DoD	Nonreporting Subcontractors
Contractor Data					
8	Direct QC Labor Hours	◆			
9	Direct Manufacturing Labor Hours	◆			
10	QC Direct Labor Dollars	◆			
11	Manufacturing Direct Labor Dollars	◆			
12	Raw Material & Purchased Parts Dollars	◆			
13	Purchased Equipment Dollars	◆			
14	—Contractor totals	◆			
Subcontractor Data					
15	Direct QC Labor Hours		◆	☐	❖
16	Direct Manufacturing Labor Hours		◆	☐	❖
17	Total Labor Hours		◆	☐	❖
18	QC Direct Labor Dollars		◆	☐	❖
19	Manufacturing Direct Labor Dollars		◆	☐	❖
20	Raw Material & Purchased Parts Dollars		◆	☐	❖
21	Purchased Equipment Dollars		◆	☐	❖
22	—Subcontractor totals		◆	◆*	◆

◆ Actual data included in report.
◆*Actual data included in “Remarks” section of report.
❖ Estimated data included in report.
☐ Data available to DoD analysts only.

C4.3.3.2.7.2. Lines 24. Direct Manufacturing Labor Hours

Enter the sum of lines 9 and 16.

C4.3.3.2.7.3. Lines 25. Total Labor Hours

Enter the sum of lines 23 and 24.

C4.3.3.2.7.4. Lines 26. Quality Control Direct Labor Dollars

Enter the sum of lines 10 and 18.

C4.3.3.2.7.5. Lines 27. Manufacturing Direct Labor Dollars

Enter the sum of lines 11 and 19.

C4.3.3.2.7.6. Lines 28. Raw Material & Purchased Parts Dollars

Enter the sum of lines 12 and 20.

C4.3.3.2.7.7. Lines 29. Purchased Equipment Dollars

Enter the sum of lines 13 and 21.

C4.3.3.2.7.8. Line 30. Total Dollars

Enter the sum of lines 14 and 22.

C4.3.3.2.7.9. Line 31. Percentage Subcontract/Outside Production & Services

For subcontracted work, enter the ratio of subcontracted cost to total cost per unit, excluding the Airframe reporting element. Compute the percentage as follows:

$$\frac{\text{Subcontracted unit cost (Line 22)} \times 100}{\text{Total Unit cost (Line 30)}}$$

For outside products and services (for the Airframe reporting element), enter the ratio of outside products and service hours to total hours per unit. Compute the percentage as follows:

$$\frac{\text{Outside Production and Service Hours per Unit (Line 17)} \times 100}{\text{Total Hours Per Unit (Line 25)}}$$

C4.3.3.2.8. Manufacturing Flow Time

C4.3.3.2.8.1. Lines 32. Start

Enter the day, month, and year production started (i.e., when the first direct manufacturing labor-hours were expended) on each unit or the first unit of each lot.

C4.3.3.2.8.2. Lines 33. Finish

Enter the day, month, and year the single unit production was accepted or the last unit of the lot was delivered.

C4.3.3.2.8.3. Lines 34 though 39. Months/Quarters

By month or quarter, whichever is most appropriate, enter the percentage of on-site manufacturing direct labor-hours completed for the time period entered in lines 32 and 33. The entries in lines 34 through 39 must total 100 percent.

C4.3.3.3. Section C

This section is for ACAT II and III contracts only.

C4.3.3.3.1. Performance Data

Lines 40 and 41 contain performance data derived from the reporting contractor's standard cost accounting system.

C4.3.3.3.1.1. Line 40. Standard Hours Per Unit

Enter the established standard manufacturing labor-hours per unit based on engineering or experience data. These standards serve as a basis for comparison and are used to assess actual performance.

C4.3.3.3.1.2. Line 41. Variance

If there is a difference between actual time consumed by the reporting contractor and standard time entered in Line 40, enter it here and indicate whether it is a plus or minus. Provide an explanation of the variance in the "Remarks" section. The contracting DoD Component will develop realization or efficiency factors as appropriate.

C4.3.3.3.2. Schedule of Release Dates

C4.3.3.3.2.1. Line 1. Planned

For each of category (Engineering in Column A, Material in Column B, Tooling in Column C, and Manufacturing in Column D), enter the planned date for the initial release of key elements to achieve production readiness in terms agreed upon by the procuring contracting officer and the contractor. These key elements include such items as engineering drawings, first release of material to the contract, set-up date for tooling, and operational date of the production (manufacturing) line. If the planned dates originally entered have been revised, enter the revised date along with the original date. Indicate the number of times the original planned date has changed by entering a sequence number after the revised date.

C4.3.3.3.2.2. Line 2. Actual

Enter the actual date for the first release in each of the categories in Columns A through E.

C4.3.4. Subcontractor Reporting for the 1921, 1921-1, and 1921-2 Reports

Subcontractor reporting instructions for each of the 1921, 1921-1, and 1921-2 reports are summarized in Table 7 and explained in more detail in the previous individual instructions for each report.

Table 7. Summary of Instructions for Prime Contractor Reporting for Subcontracts

Reporting Condition	Prime Contractor Action		
	1921	1921-1	1921-2
Subcontract contains CCDR requirements and reporting is to prime	1	1	1
Subcontract contains CCDR requirements and reporting is to DoD	2	3	3
Nonairframe subcontract does not contain CCDR requirements	4	5	6
Airframe subcontract does not contain CCDR requirements	4	7	7

1. Incorporates subcontractor report(s) into its own report(s).
2. Records total price without the recurring and nonrecurring split in column j.
3. Does not report. However, if total prime contract cost is reported for the 1921-1, note in the "Remarks" section the subcontractor name, contract number, and price of the subcontract that is reported to DoD.
4. Estimates recurring and nonrecurring split by price and WBS.
5. Estimates recurring and nonrecurring split by price and WBS for the total (only) of each functional category.
6. Provides estimates using all applicable subcontract functional categories and reporting elements.
7. Provides estimates using all applicable functional categories and reporting elements that apply to outside production and services.

C4.3.5. Plant-Wide Data Report (DD Form 1921-3)

The Plant-Wide Data Report (Figure 15) is an annual report that provides information on all business in a given plant to allow for the projection of DoD overhead rates for future defense work. The focus is on collecting data related to the calculation of DoD overhead rates at that plant regardless of where individual overhead pools may be located (e.g., off-site activities). As such, the report should generally be consistent with data being reported in the FPRA process. The report contains three major sections. Each section provides data for the prior fiscal year (FY), current FY, plus each of the three following FYs.

Section A of the report identifies direct costs for each program by functional area (i.e., engineering, manufacturing, material, and other). Direct costs are typically used to allocate, on a pro-rata basis, plant overhead costs to specific cost objectives (e.g., DoD contracts). Section B lists indirect costs and employment by functional area (i.e., engineering, manufacturing, material, other, and G&A) and major cost element (e.g., indirect labor, employee benefits, and administration). Section C shows labor rates of direct employees by functional area (i.e., Engineering, Tooling, Quality Control, and Manufacturing).

The Plant-Wide Data Report should be prepared based on the contractor's accounting system and estimating procedures. Reporting "as of" dates should coincide with the contractor's fiscal year. This report may be used for any ACAT I, II, or III program contract as determined by the responsible program manager and the CIPT for ACAT I program contract or by the program manager and the responsible Component reviewing authority for ACAT II and III program contracts. Prepare only one annual report regardless of the number of contracts being executed within the plant. Copies of the report satisfy all CCDR requirements for all contracts. The requirement for submission of plant-wide data generally continues as long as there is an active contract containing CCDR requirements. Begin by filling in items A through D at the top of the form:

A. Contractor
B. Plant Location
C. Report Period Ending
D. Date Submitted

The public reporting burden for this collection of information is estimated to average 12 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ADDRESS.

Form Approved
OMB No. 0704-0188

SECURITY CLASSIFICATION

PLANT-WIDE DATA REPORT *(Dollars in _____)*

A. CONTRACTOR | B. PLANT LOCATION

C. REPORT PERIOD ENDING | D. DATE SUBMITTED

OVERHEAD ACCUMULATION, DISTRIBUTION AND APPLICATION

SECTION A

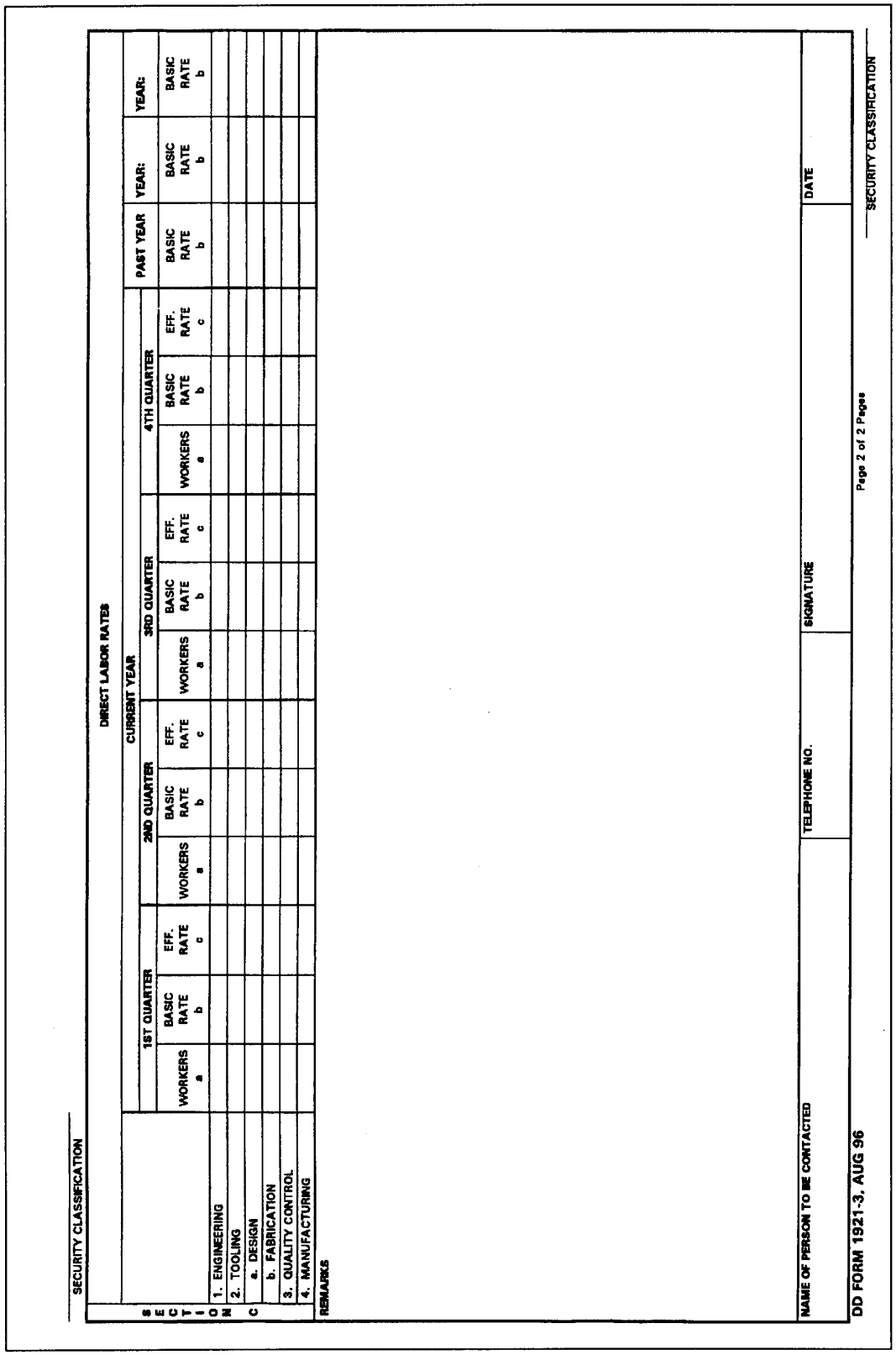
TIME PERIOD			1 FROM TO				2 ☐ ACTUAL ☐ ESTIMATE FROM TO				3 FROM TO				4 FROM TO				5 FROM TO			
PROGRAM/ PROJECT a	QTY b	BUYER c	DIRECT COST				DIRECT COST				DIRECT COST				DIRECT COST				DIRECT COST			
			ENG. d	MFG. e	MAT'L f	OTHER g	ENG. d	MFG. e	MAT'L f	OTHER g	ENG. d	MFG. e	MAT'L f	OTHER g	ENG. d	MFG. e	MAT'L f	OTHER g	ENG. d	MFG. e	MAT'L f	OTHER g
1.																						
2.																						
3.																						
4.																						
5.																						
6.																						
7.																						
8.																						
9.																						
10.																						
11.																						
12. OTHER GOVT. EFFORT																						
13. COMMERCIAL EFFORT																						
14. TOTAL DIRECT COST BASE																						

SECTION B

INDIRECT COST CATEGORY	INDIRECT COST					INDIRECT COST					INDIRECT COST					INDIRECT COST					INDIRECT COST				
	ENG. h	MFG. i	MAT'L j	OTHER k	G & A l	ENG. h	MFG. i	MAT'L j	OTHER k	G & A l	ENG. h	MFG. i	MAT'L j	OTHER k	G & A l	ENG. h	MFG. i	MAT'L j	OTHER k	G & A l	ENG. h	MFG. i	MAT'L j	OTHER k	G & A l
15. INDIRECT LABOR																									
16. EMPLOYEE BENEFITS																									
17. PAYROLL TAXES																									
18. EMPLOYMENT																									
19. COMMUNICATION/TRAVEL																									
20. PRODUCTION RELATED																									
21. FACILITIES - BUILDING/LAND																									
22. FACILITIES - FURNITURE/EQ																									
23. ADMINISTRATION																									
24. FUTURE BUSINESS																									
25. OTHER MISCELLANEOUS																									
26. CREDITS																									
27. TOTAL OVERHEAD COST																									
28. TOTAL G&A COST																									
29. OVERHEAD/G&A RATE																									
EMPLOYMENT - INDIRECT																									
30. WORKERS *(Head count in)*																									

DD FORM 1921-3, AUG 96 — PREVIOUS EDITION MAY BE USED. — Page 1 of 2 Pages — SECURITY CLASSIFICATION

Figure 15. Plant-Wide Data Report (DD Form 1921-3)—Page 1



SECURITY CLASSIFICATION

SECTION C

DIRECT LABOR RATES

	CURRENT YEAR												PAST YEAR	YEAR:	YEAR:
	1ST QUARTER			2ND QUARTER			3RD QUARTER			4TH QUARTER					
	WORKERS a	BASIC RATE b	EFF. RATE c	WORKERS a	BASIC RATE b	EFF. RATE c	WORKERS a	BASIC RATE b	EFF. RATE c	WORKERS a	BASIC RATE b	EFF. RATE c	BASIC RATE b	BASIC RATE b	BASIC RATE b
1. ENGINEERING															
2. TOOLING															
a. DESIGN															
b. FABRICATION															
3. QUALITY CONTROL															
4. MANUFACTURING															

REMARKS

NAME OF PERSON TO BE CONTACTED | TELEPHONE NO. | SIGNATURE | DATE

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Figure 15. Plant-Wide Data Report (DD Form 1921-3)—Page 2

The following instructions explain how to complete sections A through C and the "Remarks" section of the Plant-Wide Data Report.

C4.3.5.1. Section A

C4.3.5.1.1. Time Period

Data columns 1 through 5 correspond to a specific period of time and type of data (actual or estimated) as follows:

1. Actual costs for the prior year (PY).
2. Actual or estimated costs for the current fiscal year (CY) being reported.
3. Estimated costs for the current FY plus 1 year.
4. Estimated costs for the current FY plus 2 years.
5. Estimated costs for the current FY plus 3 years.

Fill in the time period covered in the space labeled "From ___ To ___" at the top of each column. For data columns 1 and 2, also indicate whether the data are actual or estimated by checking the appropriate box.

C4.3.5.1.2. Column a. Program/Project (Lines 1 through 11)

In Lines 1 through 11, first list all major DoD programs/projects for the time periods shown in data columns 1 through 5, then list all DoD effort not associated with major DoD programs/projects and all projected new business as the next entries. For purposes of this report, a major DoD program is one that constitutes at least 10 percent of the overall DoD business in the reporting plant for the total period being reported (i.e., the total for prior year, current year, and three future years). Indicate (using a single letter in parentheses) whether the program/project is for firm business on an established contract (F) or for anticipated follow-on work (e.g., new business) (A). If a given program/project is split between firm and anticipated, show the estimated percentage for the firm portion (e.g., F-X Program—FY 99 (60 percent F)).

C4.3.5.1.3. Column b. Quantity

Enter the number of units associated with the program/projects listed in Column a for the time period in data columns 1 through 5.

C4.3.5.1.4. Column c. Buyer

Enter the procuring department (e.g., Army, Navy, or Air Force) for each program/project listed in Column a.

C4.3.5.1.5. Columns d though g. Direct Cost

Enter the direct costs used to compute overhead rates for the reporting contractor by the functions listed in columns d through g (engineering, manufacturing, material, and

other). Overhead rates are usually based on total direct labor costs. However, if the reporting contractor uses another method such as direct labor hours, then report those costs and make a note in the “Remarks” section. If you make entries in Column g, “Other”, provide details of the composition of these costs in the “Remarks” section.

C4.3.5.1.6. Line 12. Other Government Effort

If work for government agencies other than the DoD is being performed in the same engineering or manufacturing facility(s), enter the total cost of the government work being performed less those costs listed in lines 1 through 11 for data columns 1 through 5. If no other government work is being performed, leave this line blank.

C4.3.5.1.7. Line 13. Commercial Effort

If commercial work is being performed that affects the calculation of DoD overhead rates, enter the total commercial cost used in calculating the overhead base. If no commercial work is being performed, leave this line blank.

C4.3.5.1.8. Line 14. Total Direct Cost Base

Enter the sum of lines 1 though 13.

C4.3.5.2. Section B

C4.3.5.2.1. Lines 15 though 26. Indirect Cost Elements

Report indirect costs for each cost element listed by function (Engineering, Manufacturing, Materials, Other, and G&A—Columns h through i) in accordance with the contractor’s accounting system and the definitions in Chapter 5 of this Manual. If reported data conflicts with the established guidelines contained in Chapters 4 and 5, show the variance and the cost effects in the “Remarks” section. For example, if direct overtime and shift premiums are recorded in overhead, report these as separate entries in the “Remarks” section. If any fringe benefits are recorded as direct costs, note the plant-wide amount by functional categories in the “Remarks” section of this report.

C4.3.5.2.2. Line 27. Total Overhead Cost

Enter the sum of lines 15 though 26 for Columns h through k.

C4.3.5.2.3. Line 28. Total G&A Cost

Enter the sum of lines 15 through 26 for Column l.

C4.3.5.2.4. Line 29. Overhead/G&A Rate

Calculate and enter the overhead or G&A rate for each function using the following formulas.

To Calculate line 29	Divide
Engineering (h)	Column h, line 27 by column d, line 14
Manufacturing (i)	Column i, line 27 by column e, line 14
Materiel (j)	Column j, line 27 by column f, line 14
Other (k)	Column k, line 27 by column g, line 14
G&A (l)	Column l, line 28 by the total of direct and indirect costs (lines 14 and 27) for each period

If you use another method to calculate overhead or G&A, provide the method and calculation in the "Remarks" section.

C4.3.5.2.5. Line 30. Employment—Indirect

Under the appropriate Columns h through l, enter the average number of plant-wide indirect employees (i.e., full time equivalent headcount) for each of the time periods covered by data columns 1 through 5. Average is defined as the total number of employees at the end of the month divided by the number of months being reported.

C4.3.5.3. Section C

Report average actual and estimated data by quarter for the contractor's fiscal year, the past year (as an average), and as projected for each of the next 2 years.

C4.3.5.3.1. Column a. Workers

Enter the plant-wide average number of direct workers included in the plant-wide labor rates for Engineering, Tooling, Quality Control, and Manufacturing. Data for Tooling shall be reported separately for design and fabrication only when these costs are segregated in the contractor's accounting system. Direct workers are those whose time is directly traceable to a cost objective (e.g., contract) for the labor categories listed in Lines 1 through 4.

C4.3.5.3.2. Column b. Basic Rate

Enter the basic plant-wide average wage rate for direct workers for each of the labor categories listed in Lines 1 through 4. Calculate the rate by dividing total direct labor dollars, exclusive of overtime premium and fringe benefits, by the related total direct labor labor-hours.

C4.3.5.3.3. Column c. Effective Rate

Enter the effective plant-wide average rate for direct workers for the labor categories in Lines 1 through 4. This rate is the result of dividing total direct labor dollars, including overtime premium, by total direct labor labor-hours. Remove direct overtime premiums included in the overhead costs and combine them with the value of total direct labor dollars to provide the numerator for the effective rate calculation.

C5. CHAPTER 5
COST DATA ELEMENT DEFINITIONS

The cost data element definitions in this chapter are arranged as described below. Section C5.1 defines the term *reporting element*, which is the primary cost breakout for the Cost Data Summary Report, the Functional Hour-Cost Report, and the Progress Curve Report. Sections C5.2 through C5.5 define each element of the four CCDR reports (the three noted above plus the Plant-Wide Data Report) in the sequence they appear on the reports. Section C5.6 consolidates the definitions for all the formats and adds additional acquisition-related definitions that are useful for background information. These definitions are presented in alphabetical order using the data element description as it appears on that format.

C5.1. REPORTING ELEMENT

A reporting element is a defined task or item on which data are to be collected. A total contract, element(s) of a work breakdown structure as defined in MIL-HDBK-881, G&A, miscellaneous items, and profit or fee are examples of reporting elements.

C5.2. COST DATA SUMMARY REPORT (DD FORM 1921)

C5.2.1. Costs Incurred

Costs incurred represent costs identified through the use of the accrual method of accounting and reporting or otherwise actually paid. Such costs could include the cost of direct labor, direct materials, and direct services identified with and necessary for the performance of a contract, as well as all properly allocated and allowable indirect costs shown in the contractor’s books.

C5.2.2. Recurring Costs

Recurring costs are repetitive elements of development and investment costs that may vary with the quantity being produced during any program phase. For example, during the development phase repetitive production-like costs incurred when producing prototype and test units are considered recurring costs. Recurring costs include the following: engineering, required for redesign, modifications, reliability, maintainability, and associated evaluation and liaison; complete reporting elements produced either for test or for operational use; tool maintenance, modification, rework, and replacement; training all Service personnel to operate and maintain equipment; and reproduction and updating of technical data and manuals.

C5.2.3. Nonrecurring Costs

Nonrecurring costs are those elements of development and investment costs that generally occur only once in the life cycle of a system. Such costs are often found in engineering, system test, tooling, and pre-production activities, and also include basic design and development through first release of engineering drawings and data, all system and subsystem test activities (except end item acceptance testing), configuration audits, qualification testing, technical publications through initial release, basic tool and production planning through initial release, all basic tooling, engineering models, partially built units for development or test purposes only, units not built to operational or tactical configuration, and specialized work force training.

C5.2.4. General and Administrative (G&A)G&A consists of indirect expenses related to the overall management and administration of the contractor's business unit, including a company’s general and executive offices, the cost of staff services such as legal, accounting, public relations, financial and similar expenses, and other general expenses. G&A is also considered a generic term used to describe expenses whose beneficial or causal relationship to cost objectives that cannot be more accurately assigned to overhead areas for engineering, manufacturing, material, and so on.

C5.2.5. Miscellaneous Items

C5.2.5.1. Undistributed Budget

Undistributed budget is that portion of the budget applicable to program effort that has not yet been allocated to control account budgets or to management reserve.

C5.2.5.2. Management Reserve

Management reserve is the amount of the total allocated budget that is held back for management control and risk purposes at the total contract level rather than designated for the accomplishment of specific tasks.

C5.2.5.3. Facilities Cost of Money

Cost of capital committed to facilities is an imputed cost determined by applying a cost-of-money rate to facilities capital employed in contract performance. Capital employed is determined without regard to whether its source is equity or borrowed capital. The resulting cost of money is not a form of interest on borrowing.

C5.2.6. Profit or Fee

Profit simply represents the excess of revenues over expenses in fixed-price contracts. In special cost-reimbursement pricing arrangements, fee is a form of profit representing an agreed-to amount beyond the initial estimate of costs that reflects a variety of factors, including risk, and is subject to statutory limitations. Fee may be fixed at the outset of performance, as in a cost-plus-fixed-fee arrangement, or may vary (within a contractually specified minimum-maximum range) during performance, as in a cost-plus-incentive-fee arrangement.

C5.2.7. Software Costs

Software is the set of computer programs and accompanying documentation developed under a given contract. Development activities include specifying software requirements, design, coding, testing, and integration. Software cost includes the internal cost of developing and documenting lines of code for both original programs and modifications to existing software (contractor-developed, government-furnished, or commercial). The cost of commercial software should also be included if delivered to and paid for by the government. Software costs do not include the cost of any contractor infrastructure software used to support other development (e.g., compilers, editors, and operating systems) that is not part of the deliverable.

C5.3. FUNCTIONAL COST-HOUR REPORT (DD FORM 1921-1)

C5.3.1. Functions

C5.3.1.1. Engineering

The Engineering functional category includes the effort and costs expended in the scientific exploration, study, analysis, design, development, evaluation, and redesign of a specific task or work breakdown structure element. Engineering also includes preparation of specifications, drawings, parts lists, and wiring diagrams; technical coordination between engineering and manufacturing; coordination of suppliers; planning for and scheduling of tests; analysis of test results, reduction of data; and preparation of reports. It also includes the determination and specification of requirements for reliability, maintainability, and quality control. Engineering is generally considered to be a basic functional cost category.

Engineering costs may also be subdivided into recurring and nonrecurring components. Nonrecurring engineering costs usually include the costs of all design and development activities through first release of drawings and data. Recurring engineering costs are generally related to sustaining engineering that involves the maintenance and updating of drawings and data and all continuous support of the fabrication, assembly, test, and delivery of contract end items.

C5.3.1.2. Tooling

The Tooling functional category includes original equipment and manufacturing aids a contractor acquires, manufactures, or replaces in the performance of a contract. Examples include jigs, dies, fixtures, molds, patterns, and special gauges. These tools, sometimes called special tools, are of such a specialized nature that their use is limited to the production of supplies or parts or the performance of services that are particular to the needs of the customer. In military business the “title” for tooling resides with the customer; in commercial practice the “title” resides with the contractor.

Tooling costs may also be subdivided into recurring and nonrecurring components. Nonrecurring tooling costs consist of all design and development costs through initial release of basic tooling. Recurring tooling costs are generally related to

sustaining tooling that involves the maintenance, repair, modification and replacement of basic tooling following initial release.

C5.3.1.3. Quality Control

The Quality Control functional category includes activities involving checking, physically inspecting, measuring, and testing the product. Quality control efforts typically focus on manufacturing, shops, receiving and shipping, and records that are necessary to assure that hardware, end items, parts, components, processes, and tests are being fabricated, assembled, and tested in accordance with engineering drawings and specifications.

C5.3.1.4. Manufacturing

The Manufacturing functional category includes the effort and costs expended in the fabrication, assembly, and functional testing of a product or end item. It involves all the processes necessary to convert a raw material into finished items.

C5.3.2. Performing Contractor

C5.3.2.1. Contractor

The contractor is the party performing the task or service or providing the equipment, hardware, facility, or end item specified in a contract for delivery to a customer or buyer, generally the DoD.

C5.3.2.2. Subcontract

A subcontract is any agreement, purchase order, or instrument other than a prime contract calling for work or for the material required for the performance of one or more prime contracts. It usually covers procurement of major components or subsystems that require the subcontractor to do extensive design, development, engineering, and testing to meet a prime contractor's procurement specifications. A company that has a subcontract without CCDR reporting requirements with a company whose prime contract contains CCDR reporting requirements is referred to as a non-reporting subcontractor.

C5.3.2.3. Outside Production and Services

Outside Production and Services is a special category of subcontracts for Airframe (defined in Appendix 2) the prime contractor is to fill out for all subcontracts not reporting separately to DoD. All subcontracts for Airframe are distributed functionally in Outside Production and Services either among all categories or as Purchased Equipment. The following guidelines apply (even when make-or-buy decisions change during contract execution):

- All subcontracts for items or services normally produced or performed in airframe plants must be distributed as appropriate among *all* functional categories of cost whether the particular contractor makes or buys the items.

- All subcontracts for items falling within the definition of Purchased Equipment as described by the special instructions for reporting Airframe in Appendix 2 must be included as Purchased Equipment whether the particular contractors make or buy the items.
- Final entries will be subcontractor's G&A and Profit or Fee.

C5.3.3. Cost Categories

C5.3.3.1. Direct Labor Hours (All functions)

Direct labor hours are those hours that can be specifically and consistently identified or assigned to a particular cost objective (e.g., a work order).

C5.3.3.2. Direct Labor Dollars (All functions)

Direct labor dollars are those dollars that can be specifically and consistently identified or assigned to a particular cost objective (e.g., work order).

C5.3.3.3. Material (Engineering)

Material within the Engineering functional category represents the cost of raw materials and purchased parts (e.g., printed circuit boards) evaluated or consumed in the performance of the engineering function for the specified reporting element. Also included is engineering test equipment (i.e., oscilloscopes, transducers, recorders, radio transmitters, converters, discriminators, and receivers) and similar equipment required to accomplish the engineering function for the specified reporting element.

C5.3.3.4. Materials and Purchased Tools (Tooling)

Materials and Purchased Tools within the Tooling functional category include the costs of the new (basic, processed, or semi-fabricated) material used in the manufacture of dies, jigs, fixtures, gauges, handling equipment, work platform, and test equipment for the fabrication and testing of the specific reporting element. It also includes the cost of tools the reporting contractor normally purchases that require negligible in-house effort to assemble into the final tool configuration. This type of tool includes such items as special welding heads, X-ray heads, attaching fixtures, control panels, and consoles.

C5.3.3.5. Materials and Purchased Parts (Manufacturing)

Materials and Purchased Parts within the Manufacturing functional category include the costs of raw and semi-fabricated material plus purchased parts used in the manufacture of the specified reporting element. The purchased parts are essentially off-the-shelf items that are widely used in industry and supplied by a specialized manufacturer who has the proprietary right to the product. The following are examples of materials and purchased parts:

- Raw materials in typically purchased forms and shapes (sheets, bars, rods, etc.).

- Semi-fabricated materials in typically purchased forms and shapes (wires, cables, fabrics, conduits, tubing, sealing strips, fiberglass, windshield glass, etc.).
- Raw castings and forgings.
- Manufactured proprietary clips, fasteners, hose clamps and assemblies, and seat belts.
- Standard and proprietary valves, cocks, and hydraulic and plumbing fittings and fixtures.
- Standard electrical fittings (conforming to underwriters and other standard specifications).

Purchased parts are distinguished from purchased equipment (defined later in Paragraph C5.3.3.10, Purchased Equipment) by cost and complexity.

C5.3.3.6. Other Direct Charges (Engineering)

Other Direct Charges within the Engineering functional category include the costs for travel, per diem shift premiums, overtime premiums, automatic data processing, reproduction of printed material, and rental of special test facilities and equipment. It also includes other engineering items not allocated to the categories of Direct Labor, Overhead, and Material for the specific reporting element.

C5.3.3.7. Other Direct Charges (Tooling)

Other Direct Charges within the Tooling functional category include the costs for travel, per diem shift premium, overtime, premiums, rental of equipment, and other tooling items not allocated to the categories of Tooling, Direct Labor, Material, Overhead, or Purchased Tools for the reporting element.

C5.3.3.8. Other Direct Charges (Quality Control)

Other Direct Charges within the Quality Control functional category include the costs for travel, per diem, shift premium, overtime premiums, automatic data processing, reproduction of printed material, and other quality control items for the reporting element not allocated to the categories of Direct Labor and Overhead. Material and test equipment should *not* be included in this category. Instead, they should be included as Materials and Purchased Parts.

C5.3.3.9. Other Direct Charges (Manufacturing)

Other Direct Charges within the Manufacturing functional category include the costs for travel, per diem, fire and extended coverage insurance, shift premiums, overtime premiums, rental of special facilities and equipment, shipping and transportation charges for items sent or returned to subcontractors, and extraordinary expenses associated with operating off-site test bases. It also includes other manufacturing costs for the reporting element that are not allocated to the categories of Direct Labor, Overhead, and Materials and Purchased Parts.

C5.3.3.10. Purchased Equipment

Purchased Equipment includes manufactured and assembled items the contractor procures from outside sources that are required for installation in the reporting element. Such equipment normally costs over $1,000 per unit and exhibits a wide range of complexity. Examples of purchased equipment for large weapon systems are multipurpose hydraulic and pneumatic pumps, motors, generators, air conditioning equipment, batteries, landing gear, instruments, pedestals, and so on. Where the reporting contractor specifically controls the design of such equipment for the unique requirements of the WBS element, purchased equipment is considered to be subcontracted and reported as such. Subcontracts for items falling within the definition of Purchased Equipment as described by the special instructions for reporting Airframe in Appendix 2 must be included as Purchased Equipment whether the particular contractor makes or buys the items.

C5.3.3.11. Material Overhead

Material Overhead is the portion of indirect costs attributable to procured or subcontracted products. It includes the cost of purchasing, expediting, and storing materials, parts, equipment, and assemblies.

C5.3.3.12. Other Costs Not Shown Elsewhere

Other Costs Not Shown Elsewhere represents those direct costs for the reporting elements not allocated to the categories of Engineering, Tooling, Quality Control, Manufacturing, Purchased Equipment, and Material Overhead. The category may include such items as security, royalty, license fees, transportation, preservation, packaging, and any applicable federal excise tax.

C5.3.3.13. Overhead

Overhead represents all indirect costs, except general and administrative expenses, that are properly chargeable for the specified reporting element.

C5.3.3.14. G&A

See Subsection C5.2.4, General and Administrative (G&A), previously in this chapter.

C5.3.3.15. Profit or Fee

See subsection C5.2.6, Profit or Fee, previously in this chapter.

C5.4. PROGRESS CURVE REPORT (DD FORM 1921-2)

Cost category definitions for this report are the same as for the Functional Cost-Hour Report (DD Form 1921-1). See Subsection C5.3.3, Cost Categories, previously in this chapter. In addition, definitions for unit, lot, block, and concurrent units/lots are included with their related instructions in Subsection C4.3.3.

C5.5. PLANT-WIDE DATA REPORT (DD FORM 1921-3)

C5.5.1. Direct Functional Categories

C5.5.1.1. Engineering

See Paragraph C5.3.1.1 previously in this chapter.

C5.5.1.2. Manufacturing

The total of costs from the Manufacturing, Tooling, and Quality Control functional categories in the Functional Cost-Hour Report (DD Form 1921-1). See Paragraphs C5.3.1.2 through C5.3.1.4 previously in this chapter.

C5.5.1.3. Material

The Material functional category represents total direct material costs from all material categories in the Functional Cost-Hour Report (i.e., Engineering Material, Tooling Materials and Purchased Parts, Manufacturing Material and Purchased Parts, and Purchased Equipment). See Paragraphs C5.3.3.3 through C5.3.3.6 and C5.3.3.10 previously in this chapter.

C5.5.1.4. Other

The Other functional category is used for all costs that cannot be applied to one of the other three functional categories (Engineering, Manufacturing, and Material).

C5.5.2. Indirect Cost Categories

Table 8 summarizes the categories for indirect cost and employment discussed in the following paragraphs.

C5.5.2.1. Indirect Labor

Indirect labor includes all labor costs classified as indirect except those related to building and equipment maintenance and future business.

- Salaries/Wages—industrial engineering, production engineering, flight test engineers, machine tool and die setting, inspection, test, pilots, contract liaison support, quality review, artists, instructors, draftsmen, scrap handler, laboratory attendants, test technicians and planners, inventory takers, field service, metallurgical, traffic, dispatching, general service, requirements yardmen, timekeeping, idle time, and other indirect wages.
- Supplemental Allowances—overtime premiums, night shift bonus, management incentive compensation, cost of living allowance, and test flight bonus.

- Apprentice and On-the-Job Training (OJT) —apprentice labor, training direct workers, trainee labor, employee training, instruction time, student labor, and basic job training.
- Administration and Supervision—general staff and clerical, factory clerical, clerical and secretarial, department administration, shop clerical, factory administration, foreman's clerks, finance department, purchasing, legal department, supervision, unit managers, and shop supervision officers executives.
- Other—commissions and bonuses, union business, and committee bargaining time.

Table 8. Summary of Indirect Cost Categories

a. Indirect Labor	**f. Production Related**	**i. Administration**
Salaries/Wages	Expendable Tools and Equipment	Office Supplies
Supplemental Allowances	Freight	Reproduction/Engineering Supplies
Apprentice and OJT	Material Handling	Professional Services
Administration and Supervision	Manufacturing Supplies/Services	Contributions
Other	Product Servicing	Other Taxes
b. Employee Benefits	Tool Handling	Dues, Memberships and Subscriptions
Paid Absences	Medical Services	Conventions and Meeting
Employee Insurance	Other	Office Services
Savings-Retirement Plans	**g. Facilities-Building/Land**	Other
Education	Depreciation and Amortization	**j. Future Business**
Other Benefits	Rentals	Bid and Proposal
c. Payroll Taxes	Maintenance	Independent Research and Development
FICA	Insurance	Advertising
Federal and State Unemployment	Utilities	Other Promotions
Composite Payroll Taxes	Property Taxes	**k. Other Miscellaneous**
Other	Plant Rearrangement	Assessments and Transfers
d. Employment	Plant Security	Employee Awards
Employee Advertising	Other	Corporate Allowances
Recruitment Travel	**h. Facilities-Furniture/Equipment**	Patents and Royalties
Employee Relocation	Depreciation and Amortization	Other
Composite Employment	Rentals	**l. Credits**
Other	Maintenance	Transfers to Other Divisions
e. Communication/Travel	Other	Cash Discounts
Data Processing Services		Other Credits
Telephone		
Postage		
Travel		
Corporate Aircraft		
Other		

C5.5.2.2. Employee Benefits

Employee benefits include the costs of fringe benefits provided to all employees, both direct and indirect.

- Paid Absences—vacation payments, payments for disability leaves, payments for military leaves, bereavement, election day and jury duty, sick leave, and holiday pay.

- Employee Insurance—employee group insurance, hospital and medical plan, dental plan, disability insurance, workmen compensation insurance, and income security plan.
- Savings—Retirement Plans —employee investment savings plan, thrift plan, employee savings plan, retirement plan, contributions-savings-stock program, basic benefit plan, and retirement income plan.
- Education—educational program, tuition refund, educational scholarships, advanced scientific education, evening scholarships, and supplemental educational expense.
- Other Benefits—welfare and recreation, employee purchase discounts, cafeteria, employee morale, unemployment benefit plan, income extension aid, extended layoff plan, separation allowance plan, and severance pay.

C5.5.2.3. Payroll Taxes

Payroll taxes include taxes on the earnings of all employees, both direct and indirect.

- FICA—Social Security taxes.
- Federal and State Unemployment—federal unemployment compensation taxes, state unemployment compensation taxes, unemployment insurance taxes, and unemployment excise tax.
- Composite Payroll Taxes—FICA and unemployment taxes, payroll taxes, and insurance.
- Other—state disability compensation tax.

C5.5.2.4. Employment

Employment includes the costs associated with recruiting new employees and transferring present employees.

- Employee Advertising—help wanted and recruitment advertising.
- Recruitment Travel—pre-employment and recruitment travel.
- Employee Relocation—employee transfers, relocation allowance, employee relocation, and pre-employment relocation.
- Composite Employment—recruitment and relocation expense.
- Other—prospective employee investigations and miscellaneous employment expense.

C5.5.2.5. Communication/Travel

Communication/travel includes costs associated with communications and travel.

- Data Processing Services—programming, system development, and rent—EDP equipment, data processing, and data processing supplies—rental.
- Telephone and Telegraph—telephone, telegraph, and teletype expenses.
- Postage—postage expense.
- Travel—traveling expense and living expense while on travel.
- Corporate Aircraft—company-owned airplane expense, repair and maintenance of company aircraft, and depreciation of flying equipment.
- Other—company car expense, transportation supplies, transportation expense, and miscellaneous transportation.

C5.5.2.6. Production Related

Production related includes the costs of supplies and services closely related to the manufacturing process.

- Expendable Tools and Equipment—perishable tools, expendable tools, special tools, perishable equipment, expense tools, tool material, dies, rework tooling, and minor shop property.
- Freight—inbound transportation, outbound transportation, freight express, and crating.
- Material Handling—stockroom, material handlers, stock handling, receiving, storerooms, and internal trucking.
- Manufacturing Supplies/Services—testing supplies, processing supplies, shop supplies, indirect material, general supplies, industrial supplies and services, purchased services, operating supplies, manufacturing services, service materials and expense, lubricants and cutting compounds, manufacturing engineering supplies, industrial gases, and tool crib supplies.
- Product-Servicing—policy and warranty adjustments, service to customers, field service expense.
- Tool Handling—tool room, tool crib attendants, crib and materials, and master crib.
- Medical Services—dispensary supplies, medical supplies and services, and first aid supplies.
- Other—zero defects promotion expense, manual and parts books, laboratory supplies, support operations, safety supplies, personnel clothing and equipment, and flight operations.

C5.5.2.7. Facilities Building/Land

Facilities building/land includes all costs associated with the use of land and buildings that are part of the plant operation.

- Depreciation and Amortization— Depreciation is a charge to current operations which distributes the cost of a tangible capital asset, less estimated residual value, over the estimated useful life in a systematic and logical manner. Amortization is a charge to current operations to reflect the reduction in an asset's cost over a period of time. This category includes depreciation of buildings, amortization of land improvements, normal depreciation, amortization of lease-hold improvements.
- Rentals—government facilities, real estate, buildings and land, and real property.
- Maintenance—cleaners and janitors, cleaning services, rest room supplies, building maintenance, land improvements maintenance, ground and outside facilities, maintenance materials, outside services, grounds, and roads.
- Insurance—building insurance, fire and liability, property insurance, building and equipment insurance, general insurance.
- Utilities—electric lights, electric power, heat, water, sewage, gas, steam, plant fuel, power plant, air conditioning, and sundry utilities.
- Property Taxes—state and local property taxes, real estate taxes, real and personal property taxes, county real estate taxes.
- Plant Rearrangement—rearrangements and new installations, rearranging, plant rearrangement expense, plant layout, rearrangement material, plant rearrangement labor.
- Plant Security—security services, plant protection supplies, plant defense, security personnel, employee badges, and security guards.
- Other—plant fire protection.

C5.5.2.8. Facilities Furniture/Equipment

Facilities furniture/equipment includes cost associated with the use of the plant’s furniture and equipment.

- Depreciation and Amortization (see definitions under Facilities)—depreciation furniture and office equipment, depreciation machines and equipment, depreciation of furniture, fixtures, and portable tools.
- Rentals—equipment rent, master equipment leases, and rent—machinery and equipment.
- Maintenance—machinery and equipment maintenance, tool maintenance furniture and equipment maintenance, test equipment, laboratory equipment, production tooling, maintenance equipment—outside services, and maintenance labor—machinery and equipment.
- Other—low-value furniture and equipment and minor property—office.

C5.5.2.9. Administration

Administration includes costs of supplies and purchased services associated with general administration.

- Office Supplies—stationary, printing and office supplies, personnel supplies, and administrative supplies.
- Reproduction/Engineering Supplies—drafting and engineering supplies, inside printing and reproduction, blueprint and photo, blueprinting, printing, and office expense.
- Professional Services—consulting and other professional services and fees, purchased drafting and engineering services, legal fees, and outside professional services.
- Contributions—donations and contributions.
- Other Taxes—sales and use taxes, state and local income taxes, state franchise taxes, miscellaneous taxes, other licenses and fees.
- Dues, Memberships and Subscriptions—membership dues, organization memberships, dues and subscriptions, books and periodicals, library expense, and publications.
- Conventions and Meetings—business conferences, technical conferences, meetings, and conventions.
- Office Services—outside office expense, office services, and temporary help.
- Other—product liability insurance, surety bond insurance, bank fees, employee communications media, and company newspaper.

C5.5.2.10. Future Business

Future business includes the costs of maintaining and increasing a company's share of the market and enhancing its corporate image.

- Bid and Proposal—proposal and bidding expense, contract bidding expense, specifications, and proposals and reports.
- Independent Research Development—product development, experimental work, independent research, independent development, and research expense.
- Advertising—consumer influence media, space advertising—magazines, product advertising.
- Other Promotions—sales promotion, presentations, public relations, demonstrations, exhibitions expense, entertainment, demonstration and indoctrination expenses, and exhibit models.

C5.5.2.11. Other Miscellaneous

Other miscellaneous includes all costs that do not relate to any other major cost category.

- Assessments and Transfers—division assessments, inter-division expense transfer, and services charged by other divisions.
- Employee Awards—employee suggestion awards plan, employee suggestions, and awards to employees.
- Corporate Allocations—general company allocations, central office expenses, corporate office expense, director's fees, corporate office overhead, and corporate management allocation.
- Patents and Royalties—patent expense, royalty expenses, and royalty and license expense.
- Other—Bad debts, miscellaneous expense, interest, motor vehicle license, sundry service expense, and unclaimed checks written off.

C5.5.2.12. Credits

Credits are indirect transfers to other divisions, allocations out, cash discounts, and year-end accounting adjustments that are not applicable to other categories.

C5.5.3. Indirect Functional Categories

C5.5.3.1. Engineering, Manufacturing, Material, and Other

These categories are defined the same as for the Functional Cost-Hour Report (DD Form 1921-1). See Paragraphs C5.3.1.1 through C5.3.1.4 previously in this chapter.

C5.5.3.2. G&A

This category is the same as for the Cost Data Summary Report (DD Form 1921). See Subsection C5.2.4 previously in this chapter.

C5.5.4. Direct Labor Rates

C5.5.4.1. Functional Categories

Except for Tooling, these categories are defined the same as for the Functional Cost-Hour Report (DD Form 1921-1). See Paragraphs C5.3.1.1 through C5.3.1.4 previously in this chapter. Tooling is subdivided into Design and Fabrication.

C5.5.4.2. Direct Labor Categories

Workers. Workers are those direct employees whose time is properly chargeable to the labor categories of Engineering, Tooling, Quality Control, and Manufacturing.

Basic Rate. The basic rate represents the average plant-wide wage rate for direct workers exclusive of overtime premium and fringe benefits.

Effective Rate. The effective rate represents the average plant-wide rate for direct workers, including overtime premiums.

C6. CHAPTER 6
CENTRAL REPOSITORY SYSTEM

To provide all CCDR stakeholders with a general understanding of the system's requirements and its planned operation, this chapter contains a summary description of a planned automated central repository system, called the CCDR Clearinghouse Repository System (CRS). The description includes required capabilities, specific business processes of the participants and their respective automation needs, and specific infrastructure requirements to support desired information flow and processing.

C6.1 GENERAL STATEMENT OF CAPABILITIES

The CRS will allow weapon system materiel developers (MDs) to submit Contractor Cost Data Reports electronically so that government users can easily access the data. Contractors may be required to submit any of the following four reports: (1) the Cost Data Summary Report (DD Form 1921), (2) the Functional Cost-Hour Report (DD Form 1921-1), (3) the Progress Curve Report (DD Form 1921-2), and the Plant-Wide Data Report (DD Form 1921-3). The formats of these reports are explained in Chapter 4.

The automated system will contain images and Excel-based sets of CCDR data. The CCDR-PO has scanned all the historical CCDRs and these will be accessible to users. After October 1998, all new CCDRs must be submitted using the electronic data interchange (EDI), Transaction Set 196. These data will be re-formatted into Excel format upon receipt. MDs should submit their EDI-formatted CCDRs electronically through the Internet or through a Value Added Network (VAN) or on a diskette through the mail. If files are submitted through the Internet or the mail, the files must be encrypted and digitally signed to protect the data from tampering in transit and positively identify the sender as an authorized MD. Files submitted through a VAN will transmitted to the government's Defense Automatic Addressing System Center (DAASC), operated by the Defense Logistics Agency (DLA). Van-transmitted files will not be encrypted or digitally signed. All CCDRs must be in electronic format by FY 2000.

Except for the 1921-3 reports, CCDR data will be available for viewing and downloading over an Internet connection by users with the appropriate security software and electronic credentials. Note: for the initial version of the system, only authorized government users will have on-line Internet access to CCDR reports. Authorized users will be able to view and download scanned or Excel-formatted files.

The CRS will *not* permit unauthorized access to data or facilitate cross over of data from one user to another. To make sure, CRS data and security servers will employ a trusted computing base comprised of evaluated commercial off-the-shelf (COTS) software and trusted components. This should provide users with high assurance about the identification and authentication mechanisms, as well as the discretionary access

controls. Figure 16 illustrates the overall flow of data through the CRS. The figure illustrates the major processes within the CRS: planning for CCDRs, preparing reports, submitting files, approving reports, and viewing and downloading. The following paragraphs describe these processes in more detail.

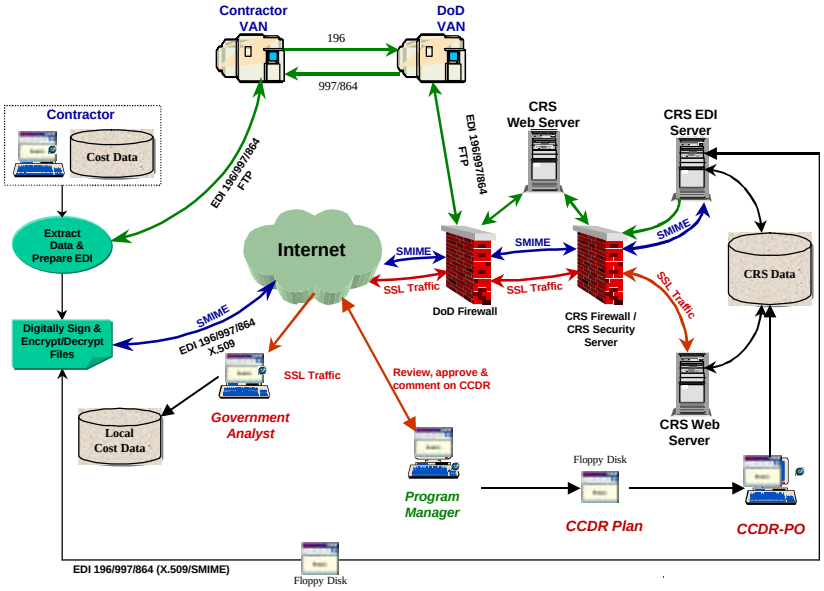

Figure 16. Proposed CRS Architecture

C6.2. CRS CAPABILITIES AND BUSINESS PROCESSES

The CRS capabilities are defined in terms of the four components shown in Figure 16. These components are:

- data suppliers (materiel developers),
- connectivity,
- authorized users of the data (e.g., DoD cost analysts and government program management personnel), and
- automation infrastructure and services.

The following subsections explain these components and how they drive the system requirements.

C6.2.1. Data Suppliers (MDs)

Data suppliers are the hardware and software materiel developers (MDs) or contractors who build the weapon systems and are required to submit the CCDRs. This subsection describes the MDs' activities during the planning, preparing, submitting, and viewing of CCDR data. Automation requirements are described where applicable.

C6.2.1.1. Planning for CCDRs

The requirement for CCDRs is specified in a CCDR Plan (see Chapter 3). This plan is developed by a representative from the program manager's (PM's) organization. It contains information detailing which reports are required, when they must be submitted, and the associated work breakdown structure (WBS). After 31 October 1998, all Plans must be developed and submitted in a Microsoft Access-based planning tool. Program management personnel are expected to submit Plans either on a floppy diskette or as e-mail attachments. After the CCDR-PO coordinates the CCDR plan with the CIPT members, the CCDR-PO will submit the plan for the CAIG Chair's approval.

Once the Plan is approved, the CCDR-PO will transmit the approval letter, along with certain contracting instructions, to the PM's representative. The CCDR-PO will also enclose instructions to the PM on how to register with the CRS via an Internet web site. The PM's representative must specify the CCDR requirements on a Contract Data Requirements List (CDRL) and reference the approved Plan as explained in Chapter 3 of this Manual. This is the mechanism by which the PM communicates the CCDR requirements to the MD. After the contract is awarded, the PM is required to submit to the CCDR-PO copies of the contract cover page (showing the contract number) and the CDRL item (showing that the CCDRs were placed on contract). More detailed information about these requirements can be found in Chapter 2 of this manual. The CCDR-PO staff will enter this information and use it to verify that incoming reports comply with the terms of the approved Plan. All incoming reports should have an approved CCDR Plan included in the database before a CCDR may be accepted. If the CCDR Plan has not been approved, the PM will communicate with the MD to get appropriate revisions made before the CCDR-PO accepts the Plan.

C6.2.1.2. Preparing CCDRs

After the contract has been awarded, the MDs must collect costs and prepare and submit required reports. The MDs must extract information out of their respective information systems and format the data into EDI Transaction Set 196 files for submission. As stated earlier, MDs may submit these files through one of three mechanisms: VANs, secure attachments to e-mail, or on diskette through the postal service.

MD may create the EDI files however they see fit. However, the CCDR-PO has provided a Windows-based tool to permit MDs to enter the data via keyboard or from a Microsoft Access file. This tool is called the CRS Pre-processor. It will allow MDs to enter data through the familiar Excel interface or work with a custom application that provides the capability to create the 1921 and the 1921-1 files. Figure 17 summarizes the capabilities and the data flow associated with the CRS Pre-processor. Also, note that the Pre-processor handler is needed in either case to create the EDI TS 196 files. The MD is able to enter, view, print and save CCDR reports. MDs can provide the Pre-processor with a file from their information systems and the application will generate the required EDI files. The Pre-processor handler expects a specified set of Microsoft Access tables to accomplish this task.

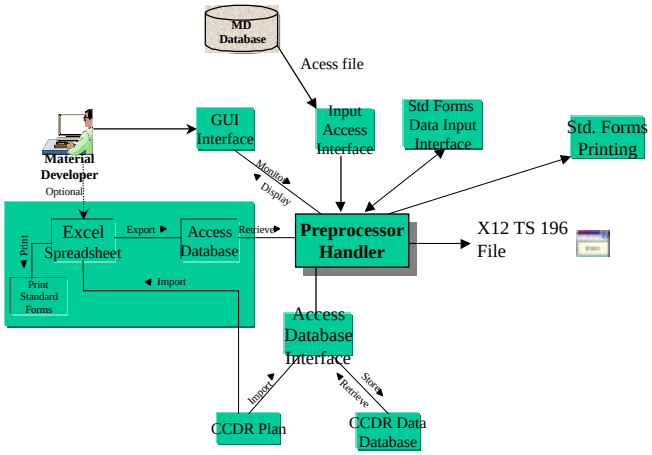

Figure 17. Capabilities and Flow of CRS Pre-Processor

C6.2.1.3. Submitting CCDRs

If the MD chooses the option of submitting reports through the Internet via a secure e-mail, the user will be transmitting his packaged EDI transaction to the CCDR-PO e-mail address. The MD must acquire Netscape Communicator browser software. The CCDR-PO will issue the MD encryption and digital signature software through a X.509 certificate. The MD will be required to register with the CCDR-PO, who, after verifying that the MD has a legitimate relationship with the government and is authorized to send EDI files, will issue the certificate. The MD must load this certificate into his Netscape browser. Once the data have been prepared and checked, the contractor will be able to submit the data in EDI Transaction Set 196 through the Internet, by sending a floppy diskette, or through a VAN account. The following paragraphs describe the required processes for each of these transmission methods.

Internet. Digitally sign the EDI files. The MD will then send the file to the CRS, and upon receipt, the CRS will decrypt the file and verify its authenticity by checking the digital signature. The CRS will generate a functional acknowledgment receipt (a TS 997), encrypt and digitally sign this, and transmit it back to the MD. The CRS will then send an e-mail to notify the appropriate PM's representative that a CCDR has been received. The PM will have 30 days to log onto the CRS and review, comment on, and approve the report. The CRS will also check the file for business rule compliance. The CCDR-PO will generate an acceptance/problem report and transmit this back to the MD in the form of a transaction set 864. This file will also be encrypted and digitally signed.

Floppy diskette. The MD will encrypt and digitally sign the file, copy it to a diskette, and mail the diskette to the CCDR-PO. The CRS will process this file in the same manner as for Internet submission, except that the 997 and 864s will be mailed back to the MD via diskette (i.e., the same way in which the file was submitted).

VAN account. All processes are the same as for Internet submission, except the files are not encrypted or digitally signed.

C6.2.1.4. Viewing CCDRs

MDs will not have the ability to view and download any data within the CRS. Access to the CRS will be restricted to authorized government users who can demonstrate a need to know. Access to non-government personnel will be considered in future releases of the CRS.

C6.2.2. Connectivity

Connectivity between data suppliers and the CRS will have to be established via Internet e-mail capability or to a VAN account. MDs will also be allowed to perform on-line registration through a standard Secure Socket Layer (SSL) Internet connection. Authorized government users will connect with the CRS via a SSL connection through the use of an approved X.509 digital certificate.

C6.2.3. Authorized Users of the Data

In addition to MDs, users of the CRS include government cost analysts, program management representatives, and CCDR-PO staff. The business needs of these other users are described here.

C6.2.3.1. Cost Analyst Users

Cost analysts need accurate historical cost data to develop estimates of current or future programs. Cost analysts may reside with a Program Manager's organization, be a member of a commodity command, a member of a service cost center, a CAIG analyst, or a support contractor. These analysts want to query, view, and download CCDR cost data. In particular, the CRS must provide authorized cost analysts with the ability to:

- access the CRS through an Internet connection;
- access the entire CRS database;
- search for specific types of reports;
- view CCDRs; and
- download desired report in Microsoft Excel, TIF, and EDI formats.

Although support contractors have a legitimate need for historical cost data, they will not have access to the CRS for this version. Support contractors may obtain access to the CRS in the future.

C6.2.3.2. Program Management Users

PM staff members have three roles in the CCDR process: CCDR planner, CCDR acceptor, and cost estimator. Typically, the PM's representative for each of these roles is different. These roles and their associated automaton needs are described below.

The PM's role in the CCDR planning process is to create a CCDR plan in the Microsoft Access format and submit the Plan electronically to the CCDR-PO for

approval. Once approved, the CCDR Plan must be loaded into the CRS data tables. This information will be used to check the reports.

In the role of acceptor, the PM must have the ability to receive e-mail notices and connect with the Internet to gain access to the CRS. The PM's representative must be able to generate secure on-line comments to the CCDR-PO.

In the role of a cost analyst, the PM's representative must have the same abilities as other cost analysts (described above).

C6.2.3.3. CCDR-PO Users

CCDR-PO staff coordinates CCDR plans, maps specific contracts to plans, consolidates problems and provides comments to the MD, and ensures that reports are correct and available. To support these roles, the CRS must allow the CCDR-PO staff to:

- enter and store CCDR Plans;
- map contracts to plans (through a copy of the submitted CDRL); and
- view, aggregate, and edit problem reports. These reports may either be generated by the CRS or be from the PMs. The CCDR-PO staff must have the ability to edit and mark the reports for transmission to the MD.

C6.2.4. Automation Infrastructure and Services

The CRS is an automated CCDR database system that contains imaged historical CCDR data as well as electronic versions of CCDR data (after June 1998). The CRS system must be able to scan and store images of historical CCDR data in a convenient form (Tagged Image File (TIF) data file format). The system must possess the requisite hardware and software to receive, process, store, and manage the EDI transmitted data. The system must allow users to access its database through an Internet connection so as to permit authorized users to view and retrieve CCDR files under a client-server environment. This general capability is subdivided into the following service areas:

- registering users;
- providing access and security controls;
- accepting data, storing it, and making it available; and
- providing backup and recovery services.

Each of these are discussed in the following paragraphs.

C6.2.4.1. Registering Users

All users must register with the CCDR-PO. The initial version of the CRS serves the following three types of users: an MD who will be submitting EDI data, a program manager's representative who will approve the reports, and government cost analysts who will be viewing and downloading the data. Each type of user has a different registration process, as explained below.

C6.2.4.1.1. EDI User Registration (MDs)

The process begins when the PM's representative completes certain CCDR contracting actions. As mentioned previously, the PM's representative is required to submit a CCDR Plan. When the Plan is approved, the CCDR-PO will instruct the PM to submit the following information:

- the name of the program;
- a copy of the cover page of the contract, which shows the contract number, contractor's name, and contract date;
- a copy of the CDRL showing that the CCDRs were placed on contract (As explained in Chapter 3, the CDRL will specify instructions for registering with the CCDR-PO. This will allow the MD to establish electronic credentials, transmit the reports, and receive receipts and problem reports.);
- the PM's point of contact (POC) responsible for accepting the reports along with the POC's phone number and e-mail address; and
- the MD's POC for submitting the reports.

The MD will be instructed to register with the CRS. To do so, the MD will log into the CCDR-PO's unclassified web site and go to the Secured Socket Layer (SSL) URL to begin the registration process. The user will be required to submit the following minimum set of data: organization, name, mailing address, phone and fax numbers, and e-mail address. After the data are submitted, an analyst within the CCDR-PO will begin the approval process. The analyst will verify that the organization has a legitimate relationship with the PM, that the address is correct, and that the person registering is a genuine employee of the MD. Once this investigation is complete, the CRS will generate an X.509 certificate and send this software to the MD via certified mail. The MD will create public and private keys and mail the ASCII version of the public key (encrypted with CCDR-PO's public key) to the CCDR-PO. The CCDR-PO system administrator will store and sign the user's public key and return it to the MD. Upon receipt of the signed public key, the MD will load the software into the Netscape browser and be ready to transmit prepared EDI messages.

C6.2.4.1.2 Program Manager Registration

The PM's representative responsible for checking and accepting the CCDRs must register with the CRS in order to log into the system. Upon CCDR Plan approval, the CCDR-PO will provide instructions to the PM about the registration process. In particular, the PM must log into the CCDR-PO's unclassified web site and go to the secure browser (using the same process as described for the MD). The PM must provide: organization, name, mailing address, phone and fax numbers, and e-mail address. The CCDR-PO will investigate the submitted application to ascertain the authenticity of the applicant.

Once authenticity has been verified, the CRS administrator will generate and send the X.509 certificate to the PM's representative. The PM's representative will follow the

same steps as described for the MD. At the same time, the CRS administrator will set the PM's access rights to those data that PM is responsible for reviewing and approving.

C6.2.4.1.3. Web User Registration (Government Cost Analysts)

The registration process for authorized users is similar to that described for the PM's representative. The principle difference is that the government cost user must apply for certain access rights. Specifically, users will register in the same manner as described above, except that they must enter the weapon system categories and program names for which they desire access. The CCDR-PO staff will investigate applicants in a similar manner as described for the PM's representative, but will also determine access rights. In general, the CRS will permit complete access to all authorized government analysts. However, there may be circumstances in which access may be denied to some sets of data. These will be determined based on higher management policies in effect at the time.

C6.2.4.2. Providing Access and Security Controls

The CRS will perform the following functions:

- ensure the National Computer Security Center classifies the software for both the operating system and the relational database management system at a level of trust equal to the C2 level or higher (The software will be operated in accordance with approved information security policy.);
- provide discretionary access controls based upon named identification and authentication, without the use of clear-text reusable passwords;
- verify and audit all data access and activity logs at a level equal to the C2 criteria or higher;
- perform audit, object reuse, discretionary access controls, identification and authentication, and other security-relevant functions at the C2 level of trust;
- provide systems administrator, Informational Systems Security Office, and computer operator role-based access controls to system privilege and management interfaces;
- manage cryptographic keys;
- apply digital signature, asymmetric key pair cryptography, and non-repudiation controls; and
- protect the confidentiality of information en route to and from the CRS, whether transmitted via the Internet, diskette, or other medium (mailed or otherwise physically transported).

C6.2.4.3. Accepting, Storing, and Making Data Available

The CRS must perform the following functions:

- allow designated users to log in and authenticate as described above;

- accept and store submitted data either from secure Internet or diskettes, including decrypting and verifying authenticity of the files;
- check compliance with EDI Transactions Set version 4010;
- generate, encrypt, digitally sign, and transmit functional acknowledgment receipts back to the source using the appropriate format (Transaction Set 997);
- generate and transmit notices to the PM;
- store the report temporarily until the PM's representative approves or comments on the report;
- check to ensure the report is consistent with the CCDR plan, is compliant with certain CCDR business rules, and is not a duplicate transmission;
- accept acceptance/problem comments from PMs through the secure CRS web page;
- allow the CCDR-PO analysts to view PM-generated comments and consolidate the text into one final acceptance or problem report to the MD;
- generate, encrypt, digitally sign, and transmit acceptance/problem reports (TS 864s) back to the MD and log the event;
- reject files that have problem reports and log the event;
- accept files into a production directory if no problem reports have been generated within 30 days of notification to the PM;
- accept and store scanned reports; and
- allow authorized users certain searches.

With regard to searches, the CRS must display CCDR metadata (i.e., summary counts of the data in the repository). Users are expected to be able to pick from three layers of lists—the weapon system categories the user has access to, the programs the user has access to, and the contracts the user has access to. The user will be able to view reports by report type (i.e., 1921s, 1921-1s, and 1921-2s). For any of the metadata views, the user will be allowed to "drill down" to view more specific contractor names, contracts, and reports dates until a specific report is identified. If the user wants to view the report on screen, the CRS will display either the TIF or Microsoft Excel file, then the user will be able to download a selected file. If the file is available in the Excel format, the user will have the option of downloading the file in its original EDI format.

C6.2.4.4. Providing Backup and Recovery Services

Once the CRS database server receives the request, its hardware and software components must cooperate with precise timing in order to provide information back to the client machine (end-user). Backup and recovery procedures for the CRS system and its databases are likely the only insurance against hardware, operating systems, software, and other kinds of failure that can result in either loss of the CRS database or denial of service.

Thus, the CRS must provide automated procedures and software to backup and recover both the imaged CCDRs and the CCDR data stored in the database. Automated backups of the whole server must occur once a week and of the CRS database, daily. Automated routines must allow for recovery of data from backup tapes. The encoding of the CRS data upon the tapes must be such that the accidental loss or theft of the tapes does not permit the revelation of their contents (encrypting the data on the way to the tape is a likely solution). The backup/recovery mechanism must not interfere with normal CRS operations. Ideally, the CRS can continue to process normally when being backed-up, and as normally as is logically possible when being restored. The CRS should have sufficient rigor in the interface between the backup/restore subsystem and the remainder of the trusted computing base to allow restoration of the CRS to a known, well-defined, and secured state at all times.

AP1. APPENDIX 1

HISTORY OF CCDR SYSTEM DEVELOPMENT

This appendix traces the history of the CCDR system from its roots in early post-World War II activities through its development today.[1]

AP1.1. INCREASE IN COST INFORMATION NEEDS

The demand for cost information increased as a result of a confluence of circumstances and changes in the defense community that took place after World War II.

The forerunners of the RAND Corporation, the Institute for Defense Analyses (IDA), and the Center for Naval Analyses (CNA) were formed during and shortly after World War II. Civilian scientists at these organizations applied newly developed operations research methods to problems involving the allocation of defense resources. Operations research sought to use scientific methods to get the most out of available resources.

Also after the war, the separation of military responsibilities (between the Services) broke down as a consequence of the rapid development of military technology and the different character of the military threat. Battles over missions were settled via approval of budgets for new weapon systems. Economic principles were introduced into defense decision making with the development and application of cost-effectiveness analyses to aid weapon selection decisions.

AP1.2. GROWTH OF COST EFFECTIVENESS ANALYSES

The use of cost-effectiveness analyses to support resource allocation decisions increased with the introduction in 1961 of the Planning, Programming, and Budgeting System (PPBS) and economic principles to the defense resource allocation process. New weapon systems were considered on the basis of cost-effectiveness. When equally effective weapon systems were compared, those estimated to cost the least won funding approvals.

The speedy introduction of the cost-effectiveness approach left the Services poorly prepared to present and defend their programs to the OSD. The Services lost some programs and had others forced upon them; consequently, they took steps to improve their cost-estimating capabilities. To support such improvement, the collection of cost data was expanded and accelerated.

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1 Much of this appendix is based on excerpts from Reference [7].

Thus, as the demand for cost estimates increased in the 1950s and early 1960s, so did the demand for records of past cost experiences. The DoD tried to meet this demand by maintaining internal records of budgets and expenditures and by buying cost information directly from the contractors who develop and produce defense systems. The practice of buying cost information from contractors started during World War II with the initiation of the Aeronautical Manufacturers' Planning Report and two similar reports that addressed missile systems and missile support equipment.

AP1.3. INTRODUCTION OF STANDARD REPORTING SYSTEMS

In 1963, the Aeronautical Manufacturers' Planning Report and related reports were replaced by a standardized reporting system called the Defense Contractors' Planning Report (DCPR). A cross-Service DCPR Implementation Task Group existed for one year to ensure uniform report implementation, data processing, and report submission. The following year, Assistant Secretary of Defense (Comptroller) Charles J. Hitch established the Cost and Economic Information System with the issuance of DoD Directive (DoDD) 7041.1, "Cost and Economic Information System" [8].

The objectives of this system were to:

- provide the ability to make justifiable choices among alternative program decisions,
- permit the negotiation of sound system contracts,
- allow closer control of development and production costs, and
- facilitate evaluation of the economic impact of procurement decisions.

Two data sets were envisioned by this initiative, one containing cost information, the other, economic information. The cost part of the Cost and Economic Information System, called the Cost Information Report (CIR), was implemented in 1966 with issuance of DoD Instruction (DoDI) 7041.2, "Cost Information Reports" [9], and the related pamphlet "Cost Information Reports (CIR) for Aircraft, Missile and Space Systems" [10]. This instruction required cost data collection via the CIR and phased out the DCPR. The CIR applied to major systems that met certain dollar thresholds. The practice of preparing program- and contract-specific data plans was initiated with the CIR. The related Economic Information System, implemented separately from the CIR, became a joint NASA-DoD system for a time, and has since taken other forms.

In 1965, President Lyndon B. Johnson expanded the PPBS and the cost-effectiveness approach to resource allocation to all federal agencies, but by that time the public had become increasingly aware of the costs and cost growth associated with weapon systems. High-ranking military officers began speaking out in public against the cost-effectiveness approach, and in 1968, Secretary of Defense James R. Schlessinger warned the Congress of the limitations of economic analysis in national security issues. Shortly afterwards, Secretary of Defense Melvin Laird de-emphasized the role of cost-effectiveness and returned decision-making authority to the Services.

By 1969, substantial cost growth had occurred in 27 of 35 major systems. The Congress became less tolerant of cost overruns and demanded more credible cost

estimates. One initiative during this period went beyond the cost reports being provided by contractors: it dealt with the management and control systems contractors used to prepare the reports. In 1967, Cost/Schedule Control Systems Criteria (C/SCSC) were established in DoD Instruction 7000.2, "Cost/Schedule Control System Criteria" [11], to encourage defense contractors to install management control systems that would provide sound bases for both the DoD and contractors to make decisions. Initiation of the C/SCSC was the result of the decline during this period in the use of a technique referred to as PERT.[2] In 1996, the C/SCSC terminology was replaced by the earned value management system (EVMS). In addition, the C/SCSC were replaced by an industry-based standard, EVMS guidelines. There were two major changes from C/SCSC to EVMS. First, ownership changed from government to contractor. Second, emphasis shifted from financial management to program management.

In 1970, the Assistant Secretary (Installations and Logistics) established the Procurement Information Report (PIR) with issuance of DoDI 7000.9, "Procurement Information Reporting (PIR)" [12], in order to collect data on contracts associated with programs that did not meet CIR dollar threshold requirements. Its purpose was to support the performance of procurement responsibilities. This report established contractor cost data collection on programs and contracts using two formats similar to those prescribed in the CIR.

Resolving to fix the procurement problems experienced in the 1960s, Defense Secretary Laird and Deputy Secretary David Packard undertook a series of actions in the early 1970s. Among them were establishing the Defense Systems Acquisition Review Council (DSARC) and the OSD Cost Analysis Improvement Group (CAIG).

AP1.4. WORK BREAKDOWN STRUCTURE (WBS) APPLICATION

Meanwhile, Military Standard (MIL-STD) 881, "Work Breakdown Structures (WBSs)", was issued in 1968 to ensure costs would be collected in a form that would support PERT cost, CIR, and other initiatives. (MIL-HDBK-881 [5] replaces MIL-STD-881.) The WBS has been fundamental to estimating costs and collecting cost data ever since. The basic concept of a WBS is to break a product down into parts to facilitate management, reporting, and cost estimating. The WBS serves as the basis for communication throughout the acquisition process. It establishes the common link to unify planning, scheduling, cost estimating, budgeting, contracting, and managing configuration and performance. See Subsection C2.3 for a more detailed description of the WBS process.

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[2] Program Evaluation and Review Technique (PERT) is a dynamic project management tool that uses statistical probability concepts to plan and estimate the time required to complete all project activities. PERT Cost extends PERT by incorporating economic considerations in the form of cost factors for the various network activities. A cost estimate prepared for each activity can be used to evaluate alternatives for accomplishing the activities based on allocation of resources.

AP1.5. CCDR SYSTEM

The CCDR system was initiated in 1973 with issuance of DoDI 7000.11. "Contractor Cost Data Reporting" [13]. The CCDR system retained all the CIR reporting requirements, added plant-wide overhead data requirements, and extended coverage to include contracts for programs that fell well below the major acquisition thresholds. It also extended coverage to include selected contracts within major acquisitions not covered by the CIR. The CCDR system superseded the CIR and PIR systems. As with the CIR, the CCDR system was intended "to establish a common database available for use in cost estimating." Uniform procedures for implementing and administering the CCDR system were published jointly by the Army, Navy, and Air Force in 1973. Contractor cost data have been collected according to the procedures prescribed in the CIR and CCDR pamphlets for more than 30 years.

Several related contractor cost management reports were initiated in the early 1970s. The Cost Performance Report (CPR), initiated in 1970 with issuance of DODI 7000.8, "Cost Performance Report" [14], collected contract cost performance data that provided objective measures of work progress to allow assessment of cost at completion of a contract. The CPR reporting system was consolidated with the Contract Funds Status Report (CFSR) with issuance of DODI 7000.10, "Contract Cost Performance, Funds Status, and Cost/Schedule Reports" [15], in 1973. The CFSR provides contractors' estimates of contract funding requirements. In 1974, DoDI 7000.10 was revised to include a new report called the Cost/Schedule Status Report (C/SSR). The C/SSR, an abbreviated version of the CPR, applies to smaller programs where CPRs are inappropriate. In 1991 DoDI 7000.10 was superseded by DoD Manual 5000.2 [16], Part 20, which, in turn, was superseded by DoD 5000.2-R, "Mandatory Procedures for Major Defense Acquisition Programs (MDAPs) and Major Automated Information Systems (MAIS) Acquisition Programs" [3] in 1996.

In the early 1980s, Defense Deputy Secretary Frank Carlucci imposed additional demands on the Defense Department's cost analysis capabilities. These changes, collectively referred to as the "Carlucci Initiatives," included the following: requiring the Services to prepare budgets focused on most likely or expected costs, to budget more realistically for inflation, and to forecast business base at contractors' plants; allowing use of multi-year procurement based on cost-benefit and risk analysis; requiring economic production rates; providing greater incentives for reaching design-to-cost goals by tying award fees to actual costs in production; and increasing efforts to forecast cost risk and uncertainty.

Assistant Secretary of Defense (Program Analysis and Evaluation) David Chu reinstitutionalized the use of cost-effectiveness analysis by updating defense acquisition management policies and procedures in the early 1990s. Over the last several years, various directives and instructions that address the CCDR, CPR, C/SSR, and CFSR were canceled and superseded by an update to DoDD 5000.1, "Defense Acquisition" [17], and related instructions (e.g., DoDI 5000.2 and DoD Manual 5000.2, referred to as DoD 5000.2-M). Cost and Operational Effectiveness Analyses (COEAs) are now required at major milestones.

In the mid-1990s, DoD undertook many acquisition reform initiatives to streamline the acquisition process. Part of the reform effort included reducing the number of DoD guidance documents and providing increased management flexibility to program managers. The revised guidance consisted of two principal categories: mandatory and discretionary. Mandatory guidance must be followed while discretionary guidance may be followed. Mandatory references include laws, directives, policies, regulations, and manuals. Discretionary references include handbooks, pamphlets, and guides and describe the procedures and processes the acquisition community may follow. Included are DoD-wide, Component-wide, and Command-wide practices that have been recommended for general use in addition to practices recommended for use by specific agencies.

In March 1996, DoD reissued DoDD 5000.1 [1] and cancelled numerous documents including DoDI 5000.2 [18] and DoD 5000.2-M [16]. The revised Directive describes broad management principles that are applicable to all DoD acquisition programs. DoD also issued a new regulation, DoD 5000.2-R, "Mandatory Procedures for Major Defense Acquisition Programs (MDAPs) and Major Automated Information System (MAIS) Acquisition Programs" [11]. The new regulation describes operating procedures that are mandatory only for MDAPs, MAIS acquisition programs, and other acquisition programs as specifically stated in the regulation.

DoDD 5000.1 [1] and 5000.2-R [3] rank first and second in order of precedence for providing mandatory policies and procedures for the management of acquisition programs, except when statutory requirements override. In the case of conflicting guidance pertaining to contracting, the Federal Acquisition Regulation and Defense Federal Acquisition Regulation Supplement take precedence over DoDD 5000.1 and 5000.2-R. These and other acquisition guidance documents can be found in the Defense Acquisition Deskbook (DAD) [19]. The DAD is an automated information repository that consists of an electronic desk reference set, a tool catalog, and a forum for the exchange of information. The reference set subdivides information into mandatory guidance and discretionary guidance.

AP2. APPENDIX 2

SPECIAL INSTRUCTIONS FOR THE AIRFRAME REPORTING ELEMENT ON DD FORMS 1921-1 AND 1921-2

The purpose of these special instructions is to achieve comparability of airframe costs, both aircraft and missiles, among contractors who prepare the Functional Cost-Hour Report (DD Form 1921-1) and the Progress Curve Report (DD Form 1921-2). These instructions apply to all ACAT programs that report airframe costs.

AP2.1. DESCRIPTION

The Airframe reporting element is used to describe the collection of certain structural assemblies, equipment, and functional costs as defined in MIL-HDBK-881 [5] and expanded below. For cost consistency purposes, airframe costs are divided into Airframe Manufactured Equipment and Airframe Purchased Equipment. The primary distinction in these categories is based upon where the airframe components are typically made. Those portions normally fabricated and assembled by airframe plants are considered Airframe Manufactured Equipment and those components normally procured from non-airframe plants are identified as Airframe Purchased Equipment. A detailed description of each is given below.

AP2.1. Airframe Manufactured Equipment

Airframe Manufactured Equipment includes labor (Engineering, Tooling, Quality Control, Manufacturing), tools, test equipment, raw materials, and purchased parts required to design, fabricate, and assemble the airframe plus the installation and checkout of all the air vehicle equipment. This category also includes installation parts, wiring, tubing, etc., for installing all equipment (known as Group A equipment), all actuating hydraulic cylinders, primary landing gear components such as struts, trinnons, shock absorbers, axles and launch bars (brakes, wheels, tires, hydraulic lines, and actuators should be included in Purchased Equipment), radomes, canopies, ducts, seats (except ejection mechanism) for passenger and crew, food preparation equipment such as galleys, stoves, refrigeration units, and fixed external tanks.

Report all Airframe Manufactured Equipment items on DD Form 1921-1 using the functional categories of Engineering, Tooling, Manufacturing (includes Raw Materials and Purchased Parts), and Quality Control. These same items are reported using the functional categories of Quality Control and Manufacturing on DD Form 1921-2 within either the contractor data or subcontract/outside production services sections. If any major portion of what is defined as Airframe Manufactured Equipment is subcontracted, report it under the subcontractor column at the same level of indenture as the prime manufacturer costs and hours.

While make-or-buy decisions often change throughout the performance of a contract, always use the appropriate functional categories to show components identified as Airframe Manufactured Equipment, whether the contractor makes or buys the items.

AP2.2. Purchased Equipment

Purchased Equipment consists of components normally procured from non-airframe plants to include landing gear (includes wheels brakes, tires, floats, skids, and skis), environmental control equipment, air conditioning equipment, multipurpose hydraulic and pneumatic pumps, power conversion equipment, instrumentation/ navigation equipment, fire detection/extinguishing equipment, flight control instrumentation, heat exchangers, electrical actuators, compressors, pressure control equipment and pressure storage vessels, and multipurpose power supplies, guns/gun turrets, starters, propellers, cameras, and trapped fuel.

Include all Purchased Equipment items in line 24 on DD Form 1921-1. These same items are reported as Purchased Equipment on DD Form 1921-2 within either the contractor data (line 13) or subcontract/outside production services sections (line 21). The combined total of these two lines is shown on line 29. While make-or-buy decisions often change throughout the performance of a contract, always show components identified as Airframe Purchased Equipment under either the contractor data or subcontract/outside production services sections whether the particular contractor makes or buys the items.

Report the price paid to vendors for purchased equipment. If the prime contractor makes the equipment in house, the cost should still be reported in the Purchased Equipment category.

AP2.2. RELATIONSHIP OF AIRFRAME AND SELECTED WBS ELEMENTS

The following subsections clarify the cost relationships between the airframe and the Systems Test and Evaluation, Systems Engineering, and Data WBS elements.

AP2.2.1. Systems Test and Evaluation

Report all tests for the airframe or interfaces between the airframe and installed mission-oriented equipment as airframe recurring costs if the tests will continue in production. All development tests performed by the airframe manufacturer for the airframe and its interfaces with the avionics equipment should fall within the specific test program called out under Systems Test and Evaluation (e.g., static, fatigue, flight tests, etc.) or Other Systems Test and Evaluation. Include instrumentation for the engineering and manufacturing development test program in Flight Test under System Test and Evaluation.

AP2.2.2. Systems Engineering

Systems Engineering should be limited to engineering for the interfaces of the total weapon system with the external environment (e.g., support equipment, test

facilities, etc.). Include engineering of all internal interfaces such as avionics to airframe, engines to airframe in Airframe as nonrecurring. Also include all tradeoffs, design, and so on, for the air vehicle in Airframe as nonrecurring.

AP2.2.3. Data

Include in the Data category only costs that will not be incurred if the data are eliminated from the Contract Data Requirements List (CDRL), DD Form 1423.

AP2.3. AIRFRAME WEIGHT REPORTING

The following subsections explain airframe weight, which is reported on line 5 of DD Form 1921-2.

AP2.3.1. Airframe (including Rotorcraft)

The structure and equipment that comprise the airframe (including rotorcraft) for cost purposes is from Military Standard 1374A, "Weight and Balance Data Reporting Forms for Aircraft" [20]. These reporting forms identify the primary items of an aircraft or rotorcraft and are a convenient way to report airframe costs.

AP2.3.2. Airframe Unit Weight

Airframe unit weight (AUW), as shown in the Defense Contractors' Planning Reports and Aeronautical Manufacturers' Reports, was developed to isolate the portion of the empty weight normally produced in an aircraft manufacturer's facility. In order to use aircraft weight statements in conjunction with CCDRs, the portions of cost not associated with the AUW must be discretely identifiable. This information can be used to develop meaningful cost and weight relationships only when the equipment included in the AUW is directly related to the airframe manufacturer's cost.

AUW is the empty weight minus the weight of specific items not included in AUW, regardless of their method of acquisition. Empty weight is the combined weight of the airframe's manufactured structure, purchased equipment, propulsion, and avionics.

For airplanes, empty weight is configured in the airplane detail specification and tabulated in Military Standard 1374A [20]. Table 2-1 shows the items not included in AUW (items 6 through 15 and 17 through 21) for airplanes.

If more than one configuration exists (as may occur in cargo/personnel transports due to cargo configuration versus personnel seat arrangements), two different empty weights may result. In that case, you may need to furnish data for both configurations.

For missiles and space launch vehicles, empty weight is configured in the missile and space launch vehicles detail specification and tabulated in Military Standard 176A [21]. Table 2-2 shows the items not included in AUW (items 4, 6 through 8, 10, and 12) for missiles and space launch vehicles.

Table 2-1. Items in Airplane Empty Weight and AUW

	Item	Empty Weight	Airframe Unit Weight
1	Fuselage	X	X
2	Wing	X	X
3	Empennage	X	X
4	Primary Landing Gear	X	X
5	Nacelle	X	X
6	Propellers	X	
7	Engines (Main & Auxiliary)	X	
8	Rubber or Nylon Fuel Cells	X	
9	Starters (Main & Auxiliary)	X	
10	Batteries & Electrical Power Supply	X	
11	Auxiliary Power Plant Unit	X	
12	Instruments	X	
13	Air Conditioning Unit	X	
14	Anti-Icing	X	
15	Avionics Hardware (Group B)	X	
16	Avionics Install (Group A)	X	X
17	Camera & Optical Viewfinders	X	
18	Turrets & Power Operated Mounts	X	
19	Wheels	X	
20	Brakes	X	
21	Tires & Tubes	X	

Table 2-2. Items in Missiles and Launch Vehicles Empty Weight and AUW

	Item	Empty Weight	Airframe Unit Weight
1	Aero. Surface	X	X
2	Body	X	X
3	Takeoff and Recovery	X	X
4	Propulsion	X	
5	Power Generator	X	X
6	Orientation	X	
7	Guidance	X	
8	Electronics	X	
9	Environmental Protection	X	X
10	Armament	X	
11	Separation System	X	X
12	Destruct System	X	
13	Emergency Equipment	X	X
14	Visual Identification	X	X

AP3. APPENDIX 3

ALPHABETICAL LIST OF DEFINITIONS

Acquisition A term used within the DoD to denote the aggregation of efforts to develop, produce, and provide a weapon system to the user. It begins in the conceptual phase and ends when the last production unit is provided to the user. It excludes all operational activities associated with the mission application of the acquired weapon system.

Actual Cost (A/C) The cost sustained in fact, on the basis of costs incurred, as opposed to a standard, predetermined, or estimated cost. Actual costs to date include cost of direct labor, direct material, and other direct charges, specifically identified to appropriate control accounts as incurred, and any overhead costs and general administrative expenses allocated to control accounts.

Actuals The labor hours, material costs, and other costs expended on a program unit or item through a specific period of time.

Administration The costs of supplies and purchased services associated with general administration:

- Office Supplies—stationary, printing and office supplies, personnel supplies, and administrative supplies.
- Reproduction/Engineering Supplies—drafting and engineering supplies, inside printing and reproduction, blueprint and photo, blueprinting, printing, and office expense.
- Professional Services—consulting and other professional services and fees, purchased drafting and engineering services, legal fees, and outside professional services.
- Contributions—donations and contributions.
- Other Taxes—sales and use taxes, state and local income taxes, state franchise taxes, miscellaneous taxes, other licenses and fees.
- Dues, Memberships and Subscriptions—membership dues, organization memberships, dues and subscriptions, books and periodicals, library expense, and publications.
- Conventions and Meetings—business conferences, technical conferences, meetings, and conventions.

- Office Services—outside office expense, office services, and temporary help.
- Other—product liability insurance, surety bond insurance, bank fees, employee communications media, and company newspaper.

Basic Rate The average plant-wide wage rate for direct workers exclusive of overtime premium and fringe benefits.

Block A block of units refers to a grouping of similarly configured items. A block can apply to all the units in a single lot or can be one of several blocks within a given lot. One block may also apply to two or more lots.

Communication/ Travel Costs associated with communications and travel.

- Data Processing Services—programming, system development, and rent—EDP equipment, data processing, and data processing supplies—rental.
- Telephone and Telegraph—telephone, telegraph, and teletype expenses.
- Postage—postage expense.
- Travel—traveling expense and living expense while on travel.
- Corporate Aircraft—company-owned airplane expense, repair and maintenance of company aircraft, and depreciation of flying equipment.
- Other—company car expense, transportation supplies, transportation expense, and miscellaneous transportation.

Concurrent Units/Lots Concurrent units or lots are items being produced within a given lot or in another lot in the same FY buy, respectively, that do not apply to the contract being reported. Items for commercial delivery or delivery to other DoD Components or programs (i.e., Military Assistance Program) on separate contracts are included in this category.

Contract An enforceable agreement between two or more competent parties, to do or not to do something not prohibited by law for a legal consideration. Any type of agreement or order for the procurement of supplies or services. The contract includes and amendments, modifications, and supplemental agreements made to the basic contract.

Contract Data Requirements List (CDRL) A customer list used to identify and establish the data and documentation required by a particular contract. Such a list is made a part of the contract.

Contract Line Item Number (CLIN)	A number applied to each of the supplies and services to be provided under a contract. CLINs may be used to: (a) administer and control contracts; (b) authorize time limit or content limit portions of a contract; (c) administer funds and appropriations on a contract; (d) procure options for additional quantities or services; and (e) pay contractors for work performed in a contract. Contract line items usually have a numerical designation (i.e., 0001, 0002, etc.) and sub-line items are identified by numerical/alphabetic designators (0001AA, AB, etc.).
Contractor	The party performing the task or service or providing the equipment, hardware, facility, or the end item specified in a contract for delivery to a customer or buyer, generally the DoD.
Costs Incurred	Costs identified through the use of the accrual method of accounting and reporting or otherwise actually paid. Such costs could include the cost of direct labor, direct materials, and direct services identified with and necessary for the performance of a contract, as well as all properly allocated and allowable indirect costs shown in the contractor's books. (Same as *Actual Cost*.)
Credits	Indirect transfers to other divisions, allocations out, cash discounts, and year-end accounting adjustments that are not applicable to other categories.
Current Fiscal Year	The most current annual period selected for accounting purposes. The current fiscal year for most agencies of the United States Government begins on the first day of October and ends on the thirtieth day of September of the following calendar year. The fiscal year is designated by the calendar year in which it ends; e.g., the fiscal year 1991 is the year beginning October 1990 and ending 30 September 1991. For contractors, the current fiscal year can be any time period encompassing a period of one year.
Data Item Description (DID)	A detailed description of the deliverable data items contained in the CDRL items. It includes content and preparation information.
Development Program	Encompasses engineering design, manufacturing of test articles, and testing to validate the design, and any other development activities undertaken before committing to production to include the following major categories: basic and applied research, engineering studies and analysis, exploratory and advanced development, selection of materials, components, processes, engineering, design, fabrication, manufacture, test of engineering models of the system components and related support.
Direct Costs	Any item or related aggregation of cost that can be identified specifically with any final cost objective, such as a product, service, program, function, or project. These costs may be charged directly to a given contract charge number or they may be charged

	to a redistribution work order subsequently distributed to contracts over a logical base. Direct costs are the opposite of indirect costs, which are classified as overhead and general and administrative and are distributed to contracts over a base normally composed of direct hours or dollars and total value added costs, respectively.
Direct Engineering Labor	Direct labor expended by engineering employees while performing all scientific investigations, technical processes, research, development, design, system engineering, testing, logistics, and support to the manufacturing process for a specific product.
Direct Headcount	Includes only the headcount of employees of those organizations whose primary mission is the performance of contracts and whose labor is charged to productive/full burden bearing work orders. It is a basis for contract pricing.
Direct Labor	Labor specifically and consistently identified or assigned to a particular cost objective (e.g., work order).
Direct Labor Hours	Hours that can be specifically and consistently identified or assigned to a particular cost objective (e.g., a work order).
Direct Labor Dollars	Dollars that can be specifically and consistently identified or assigned to a particular cost objective (e.g., a work order).
Direct Material	Raw materials, standards, commercial items, purchased parts, purchased equipment, outside production, and subcontracted items required to manufacture and assemble completed products. Direct material often also includes the costs associated with materials or products received from other company divisions under an interdivisional support agreement.
Effective Rate	The average plant-wide rate for direct workers, including overtime premiums.
Employee Benefits	The costs of fringe benefits provided to all employees, both direct and indirect. • Paid Absences—vacation payments, payments for disability leaves, payments for military leaves, bereavement, election day and jury duty, sick leave, and holiday pay. • Employee Insurance—employee group insurance, hospital and medical plan, dental plan, disability insurance, workmen compensation insurance, and income security plan. • Savings—Retirement Plans —employee investment savings plan, thrift plan, employee savings plan, retirement plan, contributions-savings-stock program, basic benefit plan, and retirement income plan.

- Education—educational program, tuition refund, educational scholarships, advanced scientific education, evening scholarships, and supplemental educational expense.
- Other Benefits—welfare and recreation, employee purchase discounts, cafeteria, employee morale, unemployment benefit plan, income extension aid, extended layoff plan, separation allowance plan, and severance pay.

Employment The costs associated with recruiting new employees and transferring present employees.

- Employee Advertising—help wanted and recruitment advertising.
- Recruitment Travel—pre-employment and recruitment travel.
- Employee Relocation—employee transfers, relocation allowance, employee relocation, and pre-employment relocation.
- Composite Employment—recruitment and relocation expense.
- Other—prospective employee investigations and miscellaneous employment expense.

Engineering The effort and costs expended in the scientific exploration, study, analysis, design, development, evaluation, and redesign of a specific task or work breakdown structure element. Engineering also includes preparation of specifications, drawings, parts lists, and wiring diagrams; technical coordination between engineering and manufacturing; coordination of suppliers; planning for and scheduling of tests; analysis of test results, reduction of data; and preparation of reports. It also includes the determination and specification of requirements for reliability, maintainability, and quality control. Engineering is generally considered to be a basic functional cost category.

Engineering costs may also be subdivided into recurring and nonrecurring components. Nonrecurring engineering costs usually include the costs of all design and development activities through first release of drawings and data. Recurring engineering costs are generally related to sustaining engineering that involves the maintenance and updating of drawings and data and all continuous support of the fabrication, assembly, test, and delivery of contract end items.

Estimated Cost at Completion (EAC) The current estimate of what the final cost will be for the task, whether for the total contract or just a portion thereof. It consists of actual direct costs to date plus indirect costs allocable to the contract, plus the estimate of the costs (direct and indirect) for authorized work remaining.

Facilities Building/Land

All costs associated with the use of land and buildings that are part of the plant operation.

- Facilities Building/Land—Includes all costs associated with the use of land and buildings which are part of the plant operation.
- Depreciation and Amortization—Depreciation is a charge to current operations which distributes the cost of a tangible capital asset, less estimated residual value, over the estimated useful life in a systematic and logical manner. Amortization is a charge to current operations to reflect the reduction in an asset's cost over a period of time. This category includes depreciation of buildings, amortization of land improvements, normal depreciation, amortization of lease-hold improvements.
- Rentals—Government facilities, rent-real estate, rent buildings and land, rent-real property, building rental.
- Maintenance—Cleaners and janitors, cleaning services, rest room supplies, building maintenance, land improvements maintenance, ground and outside facilities, maintenance materials, grounds – outside services, ground and roads.
- Insurance—Building insurance, insurance – fire and liability, property insurance, building and equipment insurance, insurance, general insurance.
- Utilities—Electric lights, electric power, heat, water, sewage, gas, steam, plant fuel, power plant, air conditioning, sundry utilities.
- Property Taxes—State and local property taxes, real estate taxes, real and personal property taxes, county real estate taxes.
- Plant Rearrangement—Rearrangements and new installations, rearranging, plant rearrangement expense, plant layout, rearrangement material, plant rearrangement labor.
- Plant Security—Security services, plant protection supplies, plant defense, security personnel, employee badges, security guards.
- Other—Plant fire protection.

Facilities Cost of Money

An imputed cost determined by applying a cost-of-money rate to facilities capital employed in contract performance. Capital employed is determined without regard to whether its source is equity or borrowed capital. The resulting cost of money is not a form of interest on borrowing.

Facilities Furniture/ Equipment

The costs associated with the use of the plant’s furniture and equipment.

- Depreciation and Amortization (see definitions under Facilities)—depreciation furniture and office equipment, depreciation machines and equipment, depreciation of furniture, fixtures, and portable tools.
- Rentals—equipment rent, master equipment leases, and rent—machinery and equipment.
- Maintenance—machinery and equipment maintenance, tool maintenance furniture and equipment maintenance, test equipment, laboratory equipment, production tooling, maintenance equipment—outside services, and maintenance labor—machinery and equipment.
- Other—low-value furniture and equipment and minor property—office.

Fee In special cost-reimbursement pricing arrangements, an agreed-to amount beyond the initial estimate of costs. In most instances, fee reflects a variety of factors, including risk, and is subject to statutory limitations. Fee may be fixed at the outset of performance, as in a cost-plus-fixed fee arrangement, or may vary (within a contractually specified minimum-maximum range) during performance, as in a cost-plus-incentive-fee arrangement.

Future Business The costs of maintaining and increasing a company's share of the market and enhancing its corporate image.

- Bid and Proposal—proposal and bidding expense, contract bidding expense, specifications, and proposals and reports.
- Independent Research Development—product development, experimental work, independent research, independent development, and research expense.
- Advertising—consumer influence media, space advertising—magazines, product advertising.
- Other Promotions—sales promotion, presentations, public relations, demonstrations, exhibitions expense, entertainment, demonstration and indoctrination expenses, and exhibit models.

General and Administrative (G&A) Indirect expenses related to the overall management and administration of the contractor's business unit, including a company's general and executive offices, the cost of staff services such as legal, accounting, public relations, financial and similar expenses, and other general expenses.
G&A is also considered a generic term used to describe expenses whose beneficial or causal relationship to cost objectives cannot be more accurately assigned to overhead areas for engineering, manufacturing, material, and so on.

High Value Items Selected WBS element level constitutes 10 percent or more of total contract costs or are designated by the Cost Integrated Product Team (CIPT) to be important contributors to the system's overall cost. For example, the selected element may not meet the 10 percent contract criteria but still may be an important element over the life of the entire program or in estimating other future programs.

High Risk Items Selected WBS element level designated by the CIPT to be higher than average risk in terms of cost, schedule, or technical performance. Key considerations are the importance of the cost drivers associated with them and the needed visibility into lower level elements for future cost evaluations.

High Technological Interest Selected WBS element has important technical consequences on that specific contract or program or on other future contracts or programs (e.g., use of composites or introduction of a new production technology).

Indirect Cost An item of cost incurred for common or joint objectives that cannot be identified specifically with a single final cost objective (e.g., contract, product, services, program, function, or project). It is therefore not readily subject to treatment as a direct cost. Indirect cost is normally used synonymously with overhead costs.

Indirect Labor All labor costs classified as indirect except those related to building and equipment maintenance and future business.

- Salaries/Wages—industrial engineering, production engineering, flight test engineers, machine tool and die setting, inspection, test, pilots, contract liaison support, quality review, artists, instructors, draftsmen, scrap handler, laboratory attendants, test technicians and planners, inventory takers, field service, metallurgical, traffic, dispatching, general service, requirements yardmen, timekeeping, idle time, and other indirect wages.
- Supplemental Allowances—overtime premiums, night shift bonus, management incentive compensation, cost of living allowance, and test flight bonus.
- Apprentice and On-the-Job Training (OJT) —apprentice labor, training direct workers, trainee labor, employee training, instruction time, student labor, and basic job training.
- Administration and Supervision—general staff and clerical, factory clerical, clerical and secretarial, department administration, shop clerical, factory administration, foreman's clerks, finance department, purchasing, legal department, supervision, unit managers, and shop supervision officers executives.

- Other—commissions and bonuses, union business, and committee bargaining time.

Indirect Material The cost of materials not entering directly into a product. Examples are cleaning fluids and perishable tools.

Letter Contract A preliminary contract, with or without a tentative price or specific amount agreed to and containing any other basic terms that can be agreed to at the time. A letter contract authorizes the contractor to commence work, incur costs, and make commitments pending negotiation and execution of the definitive contract. It obligates the customer to make either a definitive contract within a specified time, or to reimburse the contractor for costs incurred under the letter contract. The letter contract is superseded as soon as possible by a definitive contract.

Lot A lot is a contractual grouping that consists of two or more units (e.g., unit number through unit number). A lot typically represents the quantity purchased in a single fiscal year (FY). However, a given FY buy can also be subdivided into two or more lots if contractually preferable. Similarly, a lot is usually related to one contract but, at times, can be associated with two or more contracts.

Management Reserve The amount of the total allocated budget that is held back for management control and risk purposes at the total contract level rather than designated for the accomplishment of specific tasks.

Manufacturing The effort and costs expended in the fabrication, assembly, and functional testing of a product or end item. It involves all the processes necessary to convert a raw material into finished items. For the Plant-Wide Data Report (DD Form 1921-3), Manufacturing is the combination of the Manufacturing, Tooling, and Quality Control functional categories in the Functional Cost-Hour Report (DD Form 1921-1).

Manufacturing Labor Direct labor performed on the end involved in making the parts used in the finished product, and the functional testing of the product. It normally covers: fabrication, assembly, and manufacturing support activities. At times it may also include tooling and quality control labor.

Material Items that are raw, crude, or partially processed or components that have not yet been made into a definite functional item or configuration. As a cost element, material consists of raw materials, purchased parts and equipment, subcontract items, and outside production items. In operating terms, it covers the components, parts, assemblies, and supplies used in operations and maintenance. For the Plant-Wide Data Report (DD Form 1921-2),

	Material is total direct material costs from all material categories in the Functional Cost-Hour Report (DD Form 1921-2)—i.e., Engineering Material, Tooling Materials and Purchased Parts, Manufacturing Material and Purchased Parts, and Purchased Equipment.
Material (Engineering)	Material within the Engineering functional category that represents the cost of raw materials and purchased parts (e.g., printed circuit boards) evaluated or consumed in the performance of the engineering function for the specified reporting element. Also included is engineering test equipment (i.e., oscilloscopes, transducers, recorders, radio transmitters, converters, discriminators, and receivers) and similar equipment required to accomplish the engineering function for the specified reporting element.
Material Overhead	The portion of indirect costs attributable to procured or subcontracted products. It includes the cost of purchasing, expediting, and storing materials, parts, equipment, and assemblies.
Materials and Purchased Parts (Manufacturing)	The costs of raw and semi-fabricated material plus purchased parts used in the manufacture of the specified reporting element. The purchased parts are essentially off-the-shelf items that are widely used in industry and supplied by a specialized manufacturer who has the proprietary right to the product.
Materials and Purchased Tools (Tooling)	The costs of the new (basic, processed, or semi- fabricated) material used in the manufacture of dies, jigs, fixtures, gauges, handling equipment, work platform, and test equipment for the fabrication and testing of the specific reporting element. It also includes the cost of tools the reporting contractor normally purchases that require negligible in-house effort to assemble into the final tool configuration. This type of tool includes such items as special welding heads, X-ray heads, attaching fixtures, control panels, and consoles.
Mock-Up	A partial or full-scale replica of an article or its components, usually constructed of cheaper materials than required in the finished product. A mock-up is used to provide physical interfaces between structure and various systems such as electronics, hydraulics, pneumatics, electrical, and so on.
Nonrecurring Costs	Development and investment costs that generally occur only once in the life cycle of a system. Such costs are often found in engineering, system test, tooling, and pre-production activities, and also include basic design and development through first release of engineering drawings and data, all system and subsystem test activities (except end item acceptance testing), configuration audits, qualification testing, technical publications through initial

	release, basic tool and production planning through initial release, all basic tooling, engineering models, partially built units for development or test purposes only, units not built to operational configuration, and specialized work force training.
Nonreporting Subcontractor	Refers to a company that has a subcontract without CCDR reporting requirements with a company whose prime contract contains CCDR reporting requirements.
Other	A functional category in the Plant-Wide Data Report (DD Form 1921-3) used for all costs that cannot be applied to one of the other three functional categories (Engineering, Manufacturing, and Material).
Other Costs Not Shown Elsewhere	The direct costs for the reporting elements not allocated to the categories of Engineering, Tooling, Quality Control, Manufacturing, Purchased Equipment, and Material Overhead. The category may include such items as security, royalty, license fees, transportation, preservation, packaging, and any applicable federal excise tax.
Other Direct Charges (Engineering)	The costs for travel, per diem shift premiums, overtime premiums, automatic data processing, reproduction of printed material, and rental of special test facilities and equipment. It also includes other engineering items not allocated to the categories of Direct Labor, Overhead, and Material for the specific reporting element.
Other Direct Charges (Manufacturing)	The costs for travel, per diem, fire and extended coverage insurance, shift premiums, overtime premiums, rental of special facilities and equipment, shipping and transportation charges for items sent or returned to subcontractors, and extraordinary expenses associated with operating off-site test bases. It also includes other manufacturing costs for the reporting element that are not allocated to the categories of Direct Labor, Overhead, and Materials and Purchased Parts.
Other Direct Charges (Quality Control)	The costs for travel, per diem, shift premium, overtime premiums, automatic data processing, reproduction of printed material, and other quality control items for the reporting element not allocated to the categories of Direct Labor and Overhead. Material and test equipment should *not* be included in this category. Instead, they should be included as Materials and Purchased Parts.
Other Direct Charges (Tooling)	The costs for travel, per diem shift premium, overtime, premiums, rental of equipment, and other tooling items not allocated to the categories of Tooling, Direct Labor, Material, Overhead, or Purchased Tools for the reporting element.
Other Miscellaneous	All costs that do not relate to any other major cost element.

- Assessments and Transfers—division assessments, inter-division expense transfer, and services charged by other divisions.
- Employee Awards—employee suggestion awards plan, employee suggestions, and awards to employees.
- Corporate Allocations—general company allocations, central office expenses, corporate office expense, director's fees, corporate office overhead, and corporate management allocation.
- Patents and Royalties—patent expense, royalty expenses, and royalty and license expense.
- Other—Bad debts, miscellaneous expense, interest, motor vehicle license, sundry service expense, and unclaimed checks written off.

Outside Production and Services A special category of subcontracts for Airframe (defined in Appendix 2) the prime contractor is to fill out for all subcontracts not reporting separately to DoD. All subcontracts for Airframe are distributed functionally in Outside Production and Services either among all categories or as Purchased Equipment.

Overhead All indirect costs, except general and administrative expenses, that are properly chargeable for the specified reporting element. (See *Indirect Costs*)

Payroll Taxes Taxes on the earnings of all employees, both direct and indirect.

- FICA—Social Security taxes.
- Federal and State Unemployment—federal unemployment compensation taxes, state unemployment compensation taxes, unemployment insurance taxes, and unemployment excise tax.
- Composite Payroll Taxes—FICA and unemployment taxes, payroll taxes, and insurance.
- Other—state disability compensation tax.

Production Program Includes all activities related to the fabrication, assembly, and delivery of a system in specified quantities of useable end items, support equipment, training, data, modifications, and spares. Other production activities include: revision of final manufacturing drawings resulting from, qualification testing or for incorporation of different manufacturing methods, manufacture or procurement of production tooling, full production of all components, subsystems, and systems to include in-house manufacture and subcontracted parts and equipment, and acceptance testing.

Production Related The costs of supplies and services that are closely related to the manufacturing process.

- Expendable Tools and Equipment—perishable tools, expendable tools, special tools, perishable equipment, expense tools, tool material, dies, rework tooling, and minor shop property.
- Freight—inbound transportation, outbound transportation, freight express, and crating.
- Material Handling—stockroom, material handlers, stock handling, receiving, storerooms, and internal trucking.
- Manufacturing Supplies/Services—testing supplies, processing supplies, shop supplies, indirect material, general supplies, industrial supplies and services, purchased services, operating supplies, manufacturing services, service materials and expense, lubricants and cutting compounds, manufacturing engineering supplies, industrial gases, and tool crib supplies.
- Product-Servicing—policy and warranty adjustments, service to customers, field service expense.
- Tool Handling—tool room, tool crib attendants, crib and materials, and master crib.
- Medical Services—dispensary supplies, medical supplies and services, and first aid supplies.
- Other—zero defects promotion expense, manual and parts books, laboratory supplies, support operations, safety supplies, personnel clothing and equipment, and flight operations.

Profit (Contract) Covers both profit and fee. Target profit or profit as stated in a fixed price type contract (FFP, FPI). In a cost form of contract (CPFF, CPIF) it is called Fee.

Profit or Fee Profit is the excess of revenues over expenses in fixed-price contracts. In special cost-reimbursement pricing arrangements, fee is a form of profit representing an agreed-to amount beyond the initial estimate of costs that reflects a variety of factors, including risk, and is subject to statutory limitations. Fee may be fixed at the outset of performance, as in a cost-plus-fixed-fee arrangement, or may vary (within a contractually specified minimum-maximum range) during performance, as in a cost-plus-incentive-fee arrangement.

Purchased Equipment Manufactured and assembled items the contractor procures from outside sources that are required for installation in the reporting element. Such equipment normally costs over $1,000 per unit and exhibits a wide range of complexity. Examples of purchased

	equipment for large weapon systems are multipurpose hydraulic and pneumatic pumps, motors, generators, air conditioning equipment, batteries, landing gear, instruments, pedestals, and so on. Where the reporting contractor specifically controls the design of such equipment for the unique requirements of the WBS element, purchased equipment is considered to be subcontracted and reported as such. Subcontracts for items falling within the definition of Purchased Equipment as described by the special instructions for reporting Airframe in Appendix 2 must be included as Purchased Equipment whether the particular contractor makes or buys the items.
Quality Control	Activities involving checking, physically inspecting, measuring, and testing the product. Quality control efforts typically focus on manufacturing, shops, receiving and shipping, and records that are necessary to assure that hardware, end items, parts, components, processes, and tests are being fabricated, assembled, and tested in accordance with engineering drawings and specifications.
Recurring Costs	Repetitive elements of development and investment costs that may vary with the quantity being produced during any program phase. For example, during the development phase, repetitive production-like costs incurred when producing prototype and test units are considered recurring costs. Recurring costs include the following: engineering required for redesign, modifications, reliability, maintainability, and associated evaluation and liaison; complete reporting elements produced either for test or for operational use; tool maintenance, modification, rework, and replacement; training all Service personnel to operate and maintain equipment; and reproduction and updating of technical data and manuals.
Reporting Element	A defined task or item on which data are to be collected. A total contract, element(s) of a work breakdown structure as defined in MIL-HDBK-881, G&A, miscellaneous items, and profit or fee are examples of reporting elements.
Software Cost	Software is the set of computer programs and accompanying documentation developed under a given contract. Development activities include specifying software requirements, design, coding, testing, and integration. The internal cost of developing and documenting lines of code for both original programs and modifications to existing software (contractor-developed, government-furnished, or commercial). The cost of commercial software should also be included if delivered to and paid for by the government. Software costs do not include the cost of any contractor infrastructure software used to support other development (e.g., compilers, editors, and operating systems) that is not part of the deliverable.

Subcontract	Any agreement, purchase order, or instrument other than a prime contract calling for work or for the material required for the performance of one or more prime contracts. It usually covers procurement of major components or subsystems that require the subcontractor to do extensive design, development, engineering, and testing to meet a prime contractor's procurement specifications.
Tooling	The original equipment and manufacturing aids a contractor acquires, manufactures, or replaces in the performance of a contract. Examples include jigs, dies, fixtures, molds, patterns, and special gauges. These tools, sometimes called special tools, are of such a specialized nature that their use is limited to the production of supplies or parts or the performance of services that are particular to the needs of the customer. In military business the "title" for tooling resides with the customer; in commercial practice the "title" resides with the contractor. Tooling costs may also be subdivided into recurring and nonrecurring components. Nonrecurring tooling costs consist of all design and development costs through initial release of basic tooling. Recurring tooling costs are generally related to sustaining tooling that involves the maintenance repair, modification and replacement of basic tooling following initial release.
Undistributed Budget	The portion of the budget applicable to program effort that has not yet been allocated to control account budgets or to management reserve.
Unit	Unit reporting refers to individual reporting by unit number (e.g., tail number for aircraft). Such reporting is generally prescribed when specific characteristics, measurements, or other specific data are required of individual units (e.g., weight of an aircraft).
Workers	Direct employees whose time is properly chargeable to the labor categories of Engineering, Tooling, Quality Control, and Manufacturing.

AP4. APPENDIX 4

REFERENCES

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AP5. APPENDIX 5
ABBREVIATIONS

ACAT	Acquisition Category
ACO	Administrative Contracting Officer
AIS	automated information systems
AMPR	Aeronautical Manufacturers' Planning Report
ANSI	American National Standards Institute
ASC	Accredited Standards Committee
AUW	airframe unit weight
BCWP	budgeted cost of work performed
BCWS	budgeted cost of work schedules
C/SCSC	Cost/Schedule Control System Criteria
C/SSR	Cost/Schedule Status Report
CAIG	Cost Analysis Improvement Group
CARD	Cost Analysis Requirements Description
CCA	Component Cost Analysis
CCDR	Contractor Cost Data Reporting
CCDRs	Contractor Cost Data Reports
CCDR-PO	Contractor Cost Data Reporting Project Office
CDRL	Contract Data Requirements List
CER	cost-estimating relationship
CFSR	Contract Funds Status Report
CIPT	Cost Integrated Product Team
CIR	Cost Information Report
CLIN	Contract Line Item Number
CNA	Center for Naval Analyses
COEA	Cost and Operational Effectiveness Analysis
COTS	commercial off-the-shelf
CPAF	cost plus award fee
CPFF	cost plus fixed fee
CPIF	cost plus incentive fee
CPIF/AF	cost plus incentive fee/award fee
CPR	Cost Performance Report
CRS	Clearinghouse Repository System

CS	cost sharing
CWBS	contract work breakdown structure
DAB	Defense Acquisition Board
DAD	Defense Acquisition Deskbook
DCAA	Defense Contract Audit Agency
DCAAM	Defense Contract Audit Agency Manual
DCPR	Defense Contractors' Planning Report
DID	Data Item Description
DoD	Department of Defense
DoDD	Department of Defense Directive
DoDI	Department of Defense Instruction
DSARC	Defense Systems Acquisition Review Council
EAC	estimate at completion
EDI	electronic data interchange
EG	electronic generation
EMD	engineering and manufacturing development
EVMS	earned value management system
FAR	Federal Acquisition Regulation
FCP/RPR	fixed ceiling price with retroactive price determination
FFP	firm fixed price
FFP/LOET	firm fixed price, level of effort term
FICA	Federal Insurance Contribution Act
FP/AF	fixed price with award fee
FP/EPA	fixed price with economic price adjustment
FP/PRD	fixed price with prospective price redetermination
FP/RPD	fixed price with retroactive price determination
FPIF	fixed price incentive fee
FPIS	fixed price incentive successive
FY	fiscal year
G&A	general and administrative
ICE	independent cost estimate
IDA	Institute for Defense Analyses
LC	letter contract
LMI	Logistics Management Institute
LRIP	low-rate initial production
MAIS	Major Automated Information System
MD	materiel developers
MDAP	Major Defense Acquisition Program

MIL-HDBK	Military Handbook
MIL-STD	Military Standard
MMPR	Missile Manufacturers' Planning Report
MSEMPR	Missile Support Equipment Manufacturers' Planning Report
MYP	multi-year procurement
NASA	National Aeronautics and Space Administration
OIPT	Overarching Integrated Product Team
OJT	on-the-job training
OSD	Office of the Secretary of Defense
PA&E	Program Analysis and Evaluation
PCO	procuring contracting officer
PERT	Program Evaluation and Review Technique
PIR	Procurement Information Report
PM	program manager
POC	point of contact
POE	Program Office Estimate
POTS	plain old telephone service
PPBS	Planning, Programming, and Budgeting System
RDT&E	research, development, test and evaluation
RFP	request for proposals
SE	systems engineering
SSL	secured socket layer
TIF	Tagged Image File
VAN	Value Added Network
WBS	work breakdown structure